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ABSTRACT

This document provides a report on the evaluation of STEPS (Surviving Today's Experiences and Problems Successfully), the Waters Foundation Curriculum for teaching thinking skills and expository writing. Data were collected during the 1983-84 academic year, using a junior high school as a field site. Four experimental classes were taught STEPS two days a week in a three-day-per-week remedial course. Two control classes took a modern foreign language. Both experimental and control students took English classes five days per week. Experimental classes were assigned writing tasks four times during the year, while control classes were only assigned writing tasks in September and June. Four students were randomly selected in each class to participate in individual interviews intended to reveal procedures and thought processes used in completing assignments. Writing samples were evaluated through primary trait scoring. Chi-square tests revealed that on the first writing assignment, the control students scored significantly higher than the remedial STEPS students. On the June writing task, there were no significant differences between the STEPS group and the control group. Recommendations are provided on several issues: curriculum development, teacher training, improving learning and proficiency in writing, and marketing and dissemination of STEPS. Appendices include: (1) questions addressed by the evaluation; (2) primary trait scoring guides; (3) writing process interview forms; (4) course evaluation interview forms; (5) sample applications of the "students" observation system; and (6) compilation of responses to the STEPS Unit VII course evaluation form. (LMO)

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EVALUATING A CURRICULUM FOR TEACHING THINKING AND WRITING

Report on the Evaluation of the STEPS Curriculum Based on Comprehensive Data from the 1983-1984 Academic Year

Mary H. Shann

Boston University

Submitted to

The Waters Foundation

Framingham, Massachusetts

August, 1985

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EVALUATING A CURRICULUM FOR TEACHING THINKING AND WRITING

(Executive Summary)

Mary H. Shann

This report on the evaluation of the STEPS curriculum for teaching thinking skills and expository writing is addressed to several audiences: the Waters Foundation which has supported development and formative evaluation of the curriculum; the curriculum developer and her consultants who have sought ways to improve the curriculum and make it an attractive component of the language arts curriculum for middle and junior high schols; the teachers and administrators from the school system who were willing to take risks and provide a field site for studying effects of the curriculum on teaching practices and on students' learning; and finally prospective users of the curriculum whose needs and goals may be similar to those of the field site.

The STEPS curriculum involves sequencing a task into manageable steps to help students' overcome their lack of confidence in academic tasks, especially writing. Worksheets, puzzles, word problems, stories with holes, and other mysteries are some of the exercises used initially to help students read carefully and practice sequential thinking in a variety of contexts. Collecting and examining evidence, and forming and defending poitions on controversial issues receive major emphasis later in the course. Group discussions, brainstorming, organization of ideas, and outlining are done in conjunciton with writing essays. According to the developer, appropriate implementation of STEPS requires that the teacher use keen diagnostic skills in a non-threatening, supportive environment to promote the development of students' confidence, endurance in writing assignments, and support for one another's efforts.

It had been difficult to obtain an appropriate field site willing to participate in significant program monitoring, interviewing of students and teachers, and collecting of writing samples in a pre-post control group design with repeated measures. A junior high school in an affluent suburb in the Greater Boston area agreed to participate. Four experimental (n=19; 13; 17; 14) and two control classes (n=23; 26) were provided. Two experienced reading and language arts teachers were trained in the use of the STEPS curriculum. In each of the four experimental classes, they taught STEPS two days per week in a three-day-per week remedial course for students who had been evaluated by the school as performing one grade level of more below average in reading comprehension and writing skills. In lieu of this remedial course, the control students took a modern foreign language. Both experimental and control students took English classes five days per week which were devoted largely to reading and interpretation of literature. The control students were more advantaged than the experiemntal students in that the former were not judged to be in need of remedial help in the language arts.

As part of the evaluation design, writing tasks were assinged to the experimental classes four times during the school year, and to the control classes only in September and June. Four students were randomly selected in each of the six classes to participate in individual interviews with trained staffers who inquired the next day how the students approached the writing assignment, what he/she was thinking at various points, what classroom experiences had been helpful, whether editing was attempted, and how satisfied the student was with the paper. The 16 students constituted case studies of progress in writing over the school year. End-of-course evaluations were given only to STEPS students, six randomly selected from each class who were not already part of the special case studies. Structured and informal teacher interviews, logs, telephone conferences, and class records were also used in the evaluation.

The writing samples were evaluated through primary trait scoring. After training and practice trials, interrater reliability among three judges working independently approached 100%. Chi square tests revealed that on the first writing assignment, the control students scored significantly than the remedial STEPS students (= 24.78, df = 3, $p < .0001$). On the last writing task administered in June, STEPS students averaged slightly higher than the mean for the control group, but the difference was not significant. This was interpreted to mean that the STEPS group benefited from their instruction for thinking and expressing oneself clearly in writing, and that the curriculum was effective in closing the gap between the remedial and the more advantaged college-bound students.

The interviews with students revealed the procedures and thought processes they used to attack the assignments. The interviews were also helpful for pointing out what the students thought were the most beneficial learning activities; analysis of interview data in conjunction with writing samples also underscores the strong influence of interest and prior knowledge for students' success in a writing task. End of course evaluations provided more holistic views from students about the STEPS curriculum, much of which was complementary and most of which was very insightful. Even remedial students can reflect carefully on their needs and express them to an interested listener. Conversations with teachers and more formal interviews were used to ask about many of the same issues from the teachers' perspectives.

Recommendations are provided on several issues: on curriculum development; on teacher training; on improving students' learning and proficiency in writing; and on marketing and dissemination of STEPS. One of the greatest benefits which teachers cited from participation in STEPS was their heightened sense of professionalism.

Appendices are included which illustrate questions for the evaluation design and sources of information, the writing tasks, primary trait scoring scales, writing process interviews, and student and teacher interviews.

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EVALUATING A CURRICULUM FOR TEACHING THINKING AND WRITING

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PART I.: CONTEXT FOR THE EVALUATION

INTRODUCTION

This document provides a report on the evaluation of STEPS, the Waters Foundation Curriculum for teaching thinking skills and expository writing. The data for this evaluation report were collected during the 1983-84 academic year, a time in the evolution of the STEPS curriculum when the purposes and shape of the curriculum were crystallizing, when firm institutional commitments ensured a cooperative field site for testing the curriculum, and when previous STEPS evaluations and research on teaching and learning enabled us to focus new efforts on informed questions with promising techniques for inquiry.

This account is the first major report on the evaluation of STEPS in five years. Initial sections of the report attempt to summarize the maturation which has taken place in the STEPS curriculum since 1980, the history of implementation at previous field sites, and the results of earlier formative evaluations of the STEPS program. Then, the design and rationale for the 1983-84 evaluation are presented. Multiple sources of information were

used to determine how the STEPS curriculum was used, what was achieved, and why. Next, the results are presented and discussed. Finally, recommendations are given for further refinements in the materials and for the publication, marketing, and dissemination of STEPS nationally.

BACKGROUND OF STEPS DEVELOPMENT AND IMPLEMENTATION

Mrs. Faith P. Waters launched the STEPS curriculum in 1975. As a reading specialist in a Boston area secondary school, she was confronted daily with students who were unable to meet the academic expectations of their classes. Using her experience as a teacher, diagnostician, and adult learner, she designed an interdisciplinary, process curriculum to improve her students' skills in oral and written communication, critical thinking, and problem solving. Mrs. Waters named the curriculum "Sequential Thinking for Educational Problem Solving," fitting it to the acronym "STEPS" which reflected her systematic and direct approach to diagnosing and responding to learning difficulties.

Starting with what the student does well, the STEPS approach involves sequencing a task into manageable steps to overcome the student's lack of confidence and "blocking" which may have resulted from previous, often repeated failures. Worksheets, puzzles, word problems, math problems, stories with holes, and other mysteries are some of the exercises used initially to help students read carefully and practice sequential thinking in a variety of contexts. Collecting and examining evidence, and forming and defending positions on controversial issues receive major emphases later in the course. Group discussions, brainstroming, organization of ideas, and outlining are done in conjunction with essay writing. Appropriate implementation of

STEPS requires that the teacher use keen diagnostic skills in a non-threatening, supportive environment to promote the development of students' confidence, endurance, and stamina, as well as their support for one another.

By September, 1979, Mrs. Waters had developed the STEPS curriculum materials and documented the teaching/learning strategies sufficiently so that other teachers could be trained to use the program. Two schools agreed to pilot test the STEPS curriculum. One was the alternative high school in a working class, urban community adjacent to Boston where Mrs. Waters had first tried STEPS. The second school was a public junior high school in an affluent suburb west of Boston. What both field sites had in common were STEPS classes of ninth graders scoring two or more years below grade level on standardized tests of reading achievement.

At this point in the history of STEPS development, it was apparent that more extensive implementation and field testing of STEPS would require substantially more financial support and would be aided considerably if the materials were ready for commercial production and marketing. The next time field testing and formative evaluation took place was the 1983-84 academic year, whose results are the subject of the present report. In the intervening years between 1980 and 1983, Mrs. Waters revised and refined the curriculum extensively using feedback from teachers and advice from curriculum consultants, other experienced educators, and prospective publishers.

The revised draft of the curriculum no longer emphasized its broad, interdisciplinary applications but focused more on its placement in the language arts sequence. Literature components might be joined to the STEPS Curriculum but the major claim would be the development of thinking strategies for approaching a variety of academic and real life problems systematically and with confidence. Students's success would be shown in well-organized, effective, expository writing.

RESULTS OF PREVIOUS STEPS EVALUATION

The 1979-80 evaluation of the STEPS curriculum was exploratory and formative in nature, consistent with the early stages of development of the curriculum. The plan for the evaluation was an equivalent time samples, quasi experimental design with repeated observations in each of four treatment groups--two teachers in different schools using the curriculum as a one-semester course in both the first and second semesters of the academic year. As noted earlier, the two school districts which offered pilot sites for the STEPS curriculum differed drammatically in socioeconomic status, but in all classes the sample students were judged educationally at risk because they tested two or more years below grade level on standardized reading tests.

A wealth of qualitative data was collected in all four sample classes: interviews with steps students; the evaluator's and Mrs. Waters' notes from classroom observations; notes from telephone conversation with STEPS teachers; minutes from staff meetings; written communication to the evaluator from STEPS teachers; the teachers' logs and Mrs. Waters' comments on those logs; and the students' test papers, essays, and written responses to a questionnaire soliciting their evaluation of the course. The evaluator read and reread the information from the variety of sources to determine points of consensus, to check the perceptions

of one group against another, and to "test" alternate hypotheses through the data to determine which were best supported by the data. In examining the data, the evaluator questioned whether different patterns emerged, perhaps owing to differences in demographic profiles of the two communities; degree of student choice in taking the course; teacher experience with STEPS; teaching style in other courses; or openness of the larger school environment. In this evaluator's judgement, the two school sites and the two teachers could be readily distinguished on any of the characteristics above. Yet several important trends persisted, regardless of the field site, the teacher, the interviewer, or the source of information.

Students claimed to be more active participants in STEPS classroom activities than in the other courses they take, even courses with the same "STEPS" teachers teaching other subjects. The students noted the growth in their abilities to tackle more difficult writing assignments--knowing how to get started, organizing ideas, and expressing their thoughts more fluently on paper. STEPS students remarked that they liked being able to discuss their ideas with classmates; it helped them to clarify their thinking, consider another point of view, gather new information in support of their own position, and present and defend their own thinking more effectively and in greater detail.

Teaching strategies associated with these outcomes were noted by teachers and students alike. Sometimes the students could say only that steps teaching is different, without being able to explain the nature of the difference. However, teachers noted clearly how the STEPS curriculum fostered or reinforced clear patterns of behavior for them: breaking down difficult tasks into manageable pieces; using practice exercises to illustrate thought processes or develop fluency of words and ideas; noting the sequence of steps; creating an environment in which it was "OK" to make and correct mistakes, and encouraging students to help others and in the porcess help themselves. The currciculum placed the teachers in a demanding but highly safisfying role, and made them more conscious of their teaching behaviors.

THE STEPS EVALUATION DESIGN FOR 1983-1984

Rationale

The 1983-84 academic year marked the first time in the development of STEPS that a comprehensive and controlled evaluation of the STEPS curriculum could be done. Objectives for the curriculum had matured with an expressed focus on writing as an index to clear thinking. Previous evaluations had relied heavily on interviews with students and teachers to gauge the cognitive and affective benefits of the curriculum. It was time to complement these qualitative approaches to evaluation with a more objective assessment of the curriculum's effects--a pre-post control group design using students' actual performance on writing tasks as the criterion measures.

During the previous year, the STEPS development team had begun discussions with teachers and administrators at a suburban junior high school which was considering the adoption the STEPS curriculum. STEPS became a major component in the language arts program for eighth graders who needed remedial instruction in reading and writing. These students took the STEPS curriculum in addition to their English literature course, but instead of instruction in a foreign language.

The school agreed to permit the assignment of writing tasks to two control classes which would be used for purposes of comparison; they also allowed that randomly selected students in

those classes could be interviewed about their writing. More frequent writing samples and corresponding interviews of control students would not be permitted. And, in a time of national debate about teacher effectiveness and merit pay, it was thought that the purpose of repeated observations of the control classes might be misinterpreted and thus jeopardize the entire evaluation effort.

The teachers of the experimental groups, who were involved regularly in discussions about the curriculum and its use, did not seem to be threatened by the evaluation activities. Extensive data collection was permitted in the experimental classes. An outline of the evaluation design is contained in Table 1. All of the data was collected as planned with the exception of the classroom observation schedules. The evaluation assistants were advised to give priority to the collection of writing samples and the conduct of writing process interviews with STEPS and non-STEPS students. It was not possible to accommodate the students' class schedules for the purpose of interviewing and apply the observation system as well. In addition, a choice had to be made regarding time for training to score and for actually scoring the writing samples versus time to train and apply the observation system. Again the decision was made in favor of the writing assessment because it was the only opportunity to gather much needed comparative data on writing performances of STEPS and non-STEPS students.

Sample

The field site available to the STEPS curriculum was a junior high school in an affluent suburb in the Greater Boston area. The school's program had two tracts, for college-bound and non-college bound students. Four experimental and two control classes would be provided. The number of students in each of these classes is given in Table 1.

Experimental Classes

There were two experienced reading and language arts teachers trained in the use of the STEPS curriculum. The adoption plan called for them to use STEPS two equivalent days per week in the three-days-per-week remedial course; they would attend to reading assignments the remaining time. One teacher had one class of STEPS students while the other taught three STEPS classes, all at the eighth-grade level. In each of the four experimental classes the students had been evaluated by the school as performing below grade level in reading comprehension and writing skills. They were "mainstreamed" with more able non-college-bound students in the school's regular eighth-grade English classes which met five days per week.

Control Classes

The control group was comprised of non-STEPS students in two eighth-grade English classes in the college-bound tract. Their English classes also met five times per week and were taught

TABLE 1

OUTLINE OF THE EVALUATION DESIGN

Schedule of Data Collection	Experimental (STEPS) Classes				Control Classes	
	Teacher A	Teacher B			Teacher C	
	Class 1 n=19	Class 2 n=13	Class 3 n=17	Class 4 n=14	Class 5 n=23	Class 6 n=26
Writing Tasks and Primary Trait Scoring						
September	X	X	X	X	X	X
December	X	X	X	X		
April/May	X	X	X	X		
June	X	X	X	X	X	X
Thinking/Writing Process Interviews (4 S's per class)						
September	X	X	X	X	X	X
December	X	X	X	X		
April/May	X	X	X	X		
June	X	X	X	X	X	X
Classroom Observations with STUDENTS System in STEPS and non-STEPS portions of curriculum						
October	X X	X X	X X	X X		
January	X X	X X	X X	X X		
March	X X	X X	X X	X X		
May	X X	X X	X X	X X		
Course Evaluation Interviews (6 S's per class)	X	X	X	X		
Teacher Logs and Informal/Telephone Conferences	X	X	X	X		
Structured Teacher Interview (May)	X		X			

NOTE.--THE CLASSROOM OBSERVATIONS COULD NOT BE COMPLETED AS PLANNED

by an experienced teacher. The control students were more advantaged than the experimental students in that the former were not judged to be in need of remedial help in the language arts. For both experimental and control students, instruction in English classes was largely devoted to reading and interpretation of literature. The experimental students had remedial assistance with STEPS, while the control students used a comparable amount of time in their academic program for instruction in a foreign language.

Questions Addressed by the Evaluation

Improvements in the STEPS curriculum, clarification of its goals, results of previous evaluations, and the availability of an optimal field site all helped to sharpen the focus of the questions which could be asked by the 1983-84 evaluation. The types of questions for 1983-84 moved from the realm of description and general inquiry toward the level of identifying what learning experiences were associated with improved thinking and writing and why. In addition, some comparative analyses could be used since control classes were available for the first time. A list of questions which guided the conduct of the evaluation is provided in Appendix A.

Sources of Data

Multiple indices were used to gauge the effects of the STEPS curriculum and to check perceptions about how the curriculum was being used. These included student and teacher interviews; students' writing samples; classroom observations; and formal and informal conferences with teachers, administrators, and the STEPS developers. In Appendix A, the sources of data are shown in relation to the questions which each was intended to address. The application of these sources, or instruments for data collection, are also given in the evaluation design outlined in Table 1. The discussion of these instruments and the results obtained with each follows the order in which they are presented in Table 1.

PART II.: INSTRUMENTS AND RESULTS

WRITING TASKS AND PRIMARY TRAIT SCORING

From its inception, STEPS was designed as a curriculum for teaching thinking skills; the emergence of writing as a critical manifestation of clear thinking warranted the efforts which would be required to focus the 1983-84 evaluation on students' actual performance in expository writing.

Since 1969, the National Assessment of Educational Progress (NAEP) has led the way in advances in methodological research and practice in the measurment and scoring of writing achievement. The STEPS developers and evaluator agreed to follow that lead. The NAEP exercises provided suitable models for the creation of clear writing tasks which might enable reliable and valid results. Of the scoring approaches applied by NAEP--holistic scoring, primary trait scoring, and scoring of cohesion, syntax and mechanics--the method of primary trait scoring provided the best fit to the use of writing which the STEPS curriculum sought to develop.

Four writing exercises were developed by Dr. Margaret McNeill whose expertise includes curriculum development and measurement as well as project management and supervision. In consultation with the STEPS developer, teachers, and evaluator, she reviewed the proposed topics and refined the writing tasks.

Assignments were sought which would build on the interest and prior knowledge of the students and would stress organization, thoughtful presentation of ideas and/or persuasion. Topics of the four exercises and their primary traits are listed below.

Task 1: Letter on Policy for Watching T.V.

The PTO asked your principal to recommend to parents a policy about students' watching TV on week nights. Before he makes his policy, he wants to hear from the students. Write a brief letter to the principal describing the reasons for and against allowing students to watch television on week nights. Then describe what policy you would recommend. Give reasons for your recommendations.

Primary trait: Persuasion through invention and defense of a policy that is linked to a balanced presentation of the pros and cons of allowing students to watch television on week nights.

Task 2: Essay on Movie Ratings

A rating system now exists for movies. Restrictions are placed on movie viewers according to age. Write an essay explaining why you think the rating system is important or why you think it should be changed. This will be an opinion essay. Decide whether you want to start with the least important idea and build up to you strongest. Consider giving the strongest argument first.

Primary trait: Expression of an opinion on a social issue supported by several thoughtful reasons that are organized to reveal their relative importance.

Task 3: Essay on videogames

Write an essay presenting your opinion on one of the issues surrounding videogames. Show how the data collected from the class questionnaire supported your opinion, changed your opinion, or disagreed with your opinion but did not change it.

Primary trait: Reasoned presentation of an opinion/hypothesis about social behavior and a clear, thoughtful discussion of the role of research data in reinforcing, modifying, or changing the hypothesis/opinion.

Task 4: Recommendation on Class Trip.

Write a letter to the House Leaders describing your impressions of what New York City offers and of what Washington, D.C. offers to visiting students. Then indicate your recommendation for which city or cities should be included in next year's trip. Give reasons for your recommendation.

Primary trait: Persuasion through invention and defense of a recommendation linked to a thoughtful discussion of the alternatives.

In addition to the tasks and primary traits, a rationale was developed for the primary trait, and a general orientation was given for scoring. Then, following the NAEP model, a scoring guide was created, providing detailed descriptions of the possible scores. The writing exercises and primary trait scoring guides for each of the four assignments are given in Appendix B.

Two evaluation assistants were trained by Dr. McNeill in the use of the scoring systems. Each of these three individuals scored every paper independently and the group reconvened to compare scores. In the cases of discrepancies in scores assigned to a paper, the three discussed reasons for assigning the scores and came to a concensus on a score for each of the disputed papers.

Results of the scoring are given in Table 2. The time which would have been required for administration of the second and third writing tasks to the control classes was considered prohibitive by the school, so the evaluation design could include experimental and control group comparisons only on the first and fourth writing tasks. Chi square tests were used to determine the significance of differences between the distributions of writing scores. (This nonparametric technique required no assumptions about the shape of the distribution or the comparability of scores across tasks which the more powerful repeated measures ANOVA would have required.)

TABLE 2

Percentage Distributions of Writing Assessment Scores for STEPS Experimental and Control Classes and Chi Square Tests of Significance of Differences in Group Distributions

	Score	STEPS Classes	Control Classes	Chi Square
Task 1:		n=59	n=46	
Letter to	1	66.1%	26.1%	24.78
Principal	2	27.1%	41.3%	df=3
on TV Policy	3	6.8%	28.3%	p<.0001
	4	0	4.3%	
Task 2:		n=57	Not assigned	
Essay on	1	43.9%		
Movie	2	47.4%		
Ratings	3	7.0%		
	4	1.8%		
Task 3:		n=52	Not assigned	
Essay on	1	32.7%		
Video	2	51.9%		
Games	3	11.5%		
	4	3.8%		
Task 4:		n=58	n=40	
Recommenda-	1	33.3%	37.5%	N.S.
tion on	2	38.6%	40.0%	
Class Trip	3	21.1%	10.0%	
	4	7.0%	12.5%	

The Chi square for significance of differences in the distributions of STEPS and control group scores on the first writing activity was highly significant, at $p<.0001$. Examination of the percentage distributions for task 1 in Table 2 shows that the control group posted significantly more scores at the upper ratings than the STEPS group.

The differences are also shown in Table 3, where percentages from the raw score points are grouped according to the score interpretations employed by NAEP; scores of 1 or zero were considered be "below marginal," and scores 2, 3, and 4 were termed "marginal or better." Not surprisingly for a group of students judged to be in need of remedial assistance in reading comprehension and writing skills, the STEPS students had 66.1% of their group earning "below marginal" scores at the beginning of the school year. On the same task, the more advantaged students in the control classes included 73.9% who achieved scores which were "marginal or better."

The fourth writing task was administered at the end of the academic year, in June, 1984. On this task, there were no significant differences between the STEPS and control students. In fact, the STEPS group had a slightly (but nonsignificantly) higher percentages of students scoring at "marginal or better" and "competent or better" levels on task 4, as shown in Table 3.

TABLE 3

Comparison of Writing Assessment Scores for Eighth-Grade STEPS Classes and Control Classes with 1973 and 1978 NAEP Data for National Samples of 13-Year-Olds

Assessment	Not Rateable	Below Marginal	Marginal or Better	Competent or Better
Scores	(0)	(1)	(2,3, &4)	(3 & 4)
Source Date	Task 1:	Letter to the Principal on TV Viewing Policy; September, 1983		
STEPS Classes (n = 59)	0	66.1%	33.9%	6.8%
Control Classes (n = 46)	0	26.1%	73.9%	32.6%
Source Date	Task 4:	Letter to House Leaders on Recommendation for Class Trip; June, 1984		
STEPS Classes (n = 58)	0	33.3%	66.7%	28.1%
Control Classes (n = 40)	0	37.5%	62.5%	22.5%
Source Date	NAEP:	Letter to Principal Recommending Change for School Improvement; 1973, 1978		
National Sample (n = 2,552) 1973	2.9%	28.0%	69.1%	28.4%
National Sample (n = 2,793) 1978	2.3%	33.6%	64.0%	20.3%

This result should not be interpreted that the STEPS group outperformed the more advantaged control students, or that the control group's performance diminished over the course of the school year. Comparing performance on similar but nontheless different writing tasks (1 versus 4) is tenuous at best. A more defensible interpretation is that the STEPS group benefitted from their instruction for thinking and expressing oneself clearly in writing. The "treatments" received by the control students in their English classes and foreign language classes were not designed expressly to improve writing skills. It is also important to note that the STEPS students received the writing tasks as part of their course and knew that their scores would contribute to their grades; the control students did not have similar motivation to perform well. The student interviews described in the next section were used to probe about the influence of prior knowledge, interest, instruction, and situational factors on the students performance in writing.

WRITING PROCESS INTERVIEWS

This evaluation sought to determine not only whether the STEPS curriculum could help students write more clearly and effectively but also why and how STEPS might be accomplishing this goal. It was decided to interview students soon after their experience with a writing activity. Interview schedules were designed to inquire about the student's knowledge and interest in the topic, and about the thinking strategies students use in preparation for writing, during writing, and in rewriting. Four different writing process interviews were developed, with most of the questions specific to the corresponding writing assignment. In the first and fourth writing process interviews, additional general questions were asked about what factors and learning experiences help students to write more easily. The four writing process interview schedules are given in Appendix C.

As shown in Table 1, the evaluation design called for thinking/writing process interviews in conjunction with each of the four writing tasks for the STEPS classes. Four students in each of the four STEPS classes were randomly selected for participation in the interviews; each student was interviewed four times over the course of the school year. Of the 16 students, two were transferred, leaving 14 STEPS students with complete sets of

writing samples and process interviews. Four students in each of the two control classes were also randomly selected for participation in the process interviews. Since only two writing samples could be administered in the control classes, only two process interviews (first and fourth) were used with the control students.

The evaluator compiled a case study of materials for each student selected for participation in the process interviews. For STEPS students, a set of data included four papers and four interviews; for control subjects, a set contained two papers and two interviews. The information was condensed to two pages of notes for each student. The notes were used to check if there were patterns of factors that made writing easier, more fluent, more effective. Students' expression of interest and prior knowledge in the topics were also noted in relation to scores on their papers. Special attention was given to the students account of how he or she approached the assignment, what pre-writing activities the student employed, what classroom activities may have helped the student with the assignment, and what the student thought of his or her finished product. The evaluator returned to the original interview forms to check whether these responses differed by topic, over time, among individuals, and between groups. The analysis was a qualitative process of sifting through the data, discerning patterns, and checking those trends against alternate hypotheses to determine which were best supported by the responses.

One overriding impression about the writing process interviews is that students' accounts of what they wrote in the letters or essays matched almost verbatim what they actually wrote on those assignments. (The interveiwers had been trained to take verbatim responses to all interview questions whenever possible.) Thus it seemed that asking students about a writing assignment one or two days after the assignment was completed might be an accurate way to find out about the thinking strategies and activities employed in the writing process.

General Questions

The first and fourth interviews asked students to locate writing as a difficult or easy task among the range of subjects and types of assignments they had to do in school. In both the STEPS classes and the control classes, there were students who named writing easiest and most difficult, but most placed it in between. Without prompting, many of the students would qualify how easy or difficult writing comes to them; "It depends on the assignment." These interviews also inquired directly about what makes writing easier for the students, including characteristics of the assignment, where and when it is done, and what resources are helpful. Without exception the students noted that familiar, interesting topics are easiest to write about. About as many would like a choice of topic as would have a topic assigned, as long as its interesting.

Individual preferences were also reflected in the range of answers to where they would like to work on an assignment and how much time they needed. What seemed to be behind the responses for both STEPS and control students were the concerns about where they could get help getting started, from the teacher or a parent, and/or where they could concentrate. If only one class period was allowed for an assignment, students wanted to take it home if it was at all difficult. A few very blase students (with consistently low writing scores) didn't seem to care what conditions prevailed.

In the first process interview, the students in both groups seemed tentative in their responses to questions about whether certain activities and resources make writing easier, like discussing ideas, looking up information, gathering data, working by oneself, or looking at other writing samples. Unlike the spontaneous and immediate responses about interesting, familiar topics being easier to write about, it seemed that students were thinking about the helpfulness of the aids to writing for the first time--testing the interviewer's prompts against their writing experiences, and qualifying answers according to the topic of the writing assignment.

In the fourth process interview, the STEPS students seemed to be surer of their answers to these general questions about aids to writing, backing up their choices with examples and unprompted commentary. In general, individual control students reported the same preferences as before, but noting that they did not have much writing experience during the year.

The general questions on ease of writing and facilitators to writing were used only in the first and fourth interviews. With this exception, all four interviews had parallel structures with sets of questions on the following issues: interest in and knowledge of the topic; relation of classroom instruction to the writing assignment (particularly in interviews two and three, relating to movie ratings and videogames); and the individual thinking, planning, and writing and editing processes the student used to complete the assignment.

Interest and Knowledge of Topic

Students' responses indicated that their interest in the topic and the prior knowledge they bring to the assignment have a great deal to do with their subjective sense of ease in writing. It also appears that these factors have a great deal to do with characteristics of the papers they produce, including fluency and coherence. The fourth writing task, to write a letter to the house leaders making a recommendation on the class trip for year's

eighth grader, produced the most fluent and animated writing of any of the assigned topics. It was clear from the interviews that their recent experience on the class trip to New York City and Washington, D.C. was a vivid memory and for most of them a very positive one. Several students in both the STEPS and control groups commented that they liked being asked for their opinions and liked doing the assignment; most of the students were pleased with their finished papers.

The STEPS students, who could compare the "trip letter" with the essay on videogames, uniformly noted that the letter was easier to write because they could rely on their own experience and "had just lived it." The videogames essay required collecting new information--others' opinions--and making comparisons before they could proceed with the assignment. Several of the students expressed having little or no experience with videogames and just as little interest. However one STEPS student who did very poorly, scoring all "1's" on the other three writing assignments did well (a "3") on the videogames essay, probably owing to his superior knowledge of the topic. He claimed no further interest in videogames; they were "passe," but he had been spending up to 20 hours and $50. per week in a local arcade. His paper read as though he knew what he was talking about.

The previous assignments on watching television on week nights and on the merits of the movie rating system were mildly interesting to the students, but few expressed strong interest or lack of interest in the topics. There was a great deal of

sameness to the positions voiced on the T.V. policy; "T.V. has some value, but get your homework done first." The control students were simply more articulate in expressing this position in the first writing assignment. The essay on movie ratings, given only to the STEPS group, seemed to lend itself to more issues for discussion. On this topic the interest and prior knowledge were more variable. In all, the topic of videogames was least interesting to the students and the class trip most interesting.

Connection of Instruction to Assignment

The second, third, and fourth writing process interviews included sets of questions asking students directly whether their classroom instruction affected how they proceeded with the assignemnts. As should be expected, all of the control students reported that they saw no link between instruction in their English classes and the letter writing assignment on the class trip (task 4). However, one noted that reading literature helped her to take another's point of view, which was helpful for the assignment, and another felt that her experience in writing over the course of the year was probably useful.

Almost all of the STEPS students named several classroom experiences which were helpful for doing the writing assignments: taking notes; discussing ideas; "especially the planning;" doing a rough draft; and, for the videogames essay, "the computer results." These claims were elaborated in responses to the next

set of questions on how they approached the assignment, but the questions relating classroom experiences to the writing assignments were asked directly at first, to find out where any help might be coming from--STEPS or some other school experience.

The only instructional aid mentioned which was obviously not part of the STEPS curriculum was "the triangle." It was explained to the evaluator that language arts teachers throughout the junior high school use the figure to help students think about a writing assignment from three different perspectives--the writer, the audience, and the content itself. It appeared that some STEPS students used the approach to advantage in the first writing task, but difficulties arose in later assignments when other planning techniques were introduced in the STEPS curriculum. Thinking in terms of triangles while creating lists of pros and cons or following guidelines for data collection and interpretation produced some dissonance for at least some of the STEPS students. Apparently the students did not feel free to vary their approaches to planning and pre-writing.

It was clear from students' responses from that classroom discussion had an influence on the direction, fluency and clarity of their writing. Most often that influence was positive. However, there may have been some detrimental effects. For example, there were a disproportionate number of students in one class who missed the point of the first assignment. As noted in Appendix B, they were supposed to advise the principal what policy

to recommend on students' watching television on week nights. Instead, they argued who should make that policy, the school or the family. It is most likely that the classroom discussion lead them off the track of the original assignment, even though the task was given to the students in writing.

Experience in the Writing Process

In all four sets of interviews, students were asked how they first reacted to each writing assignment, how they got started, what were the subsequent steps, whether this process was what the student normally did, whether the student "got stuck" at all, what kind of editing the student tried to accomplish, and whether the student was pleased with the finished product. This "metacognitive" ability to think about thinking and discuss the experience of writing was the "common denominator" in the last set of questions on the interviews.

To the extent one can be sure with such cumbersome qualitative data, it seems clear that this metacognitive ability to reflect on the processes of thinking and writing is closely related to performance on the writing tasks. Interviews of control students who scored "competent or better," (3 or 4), revealed confident, articulate responses about how they approached the writing assignment and what they were trying to accomplish. It should be noted too that interest and prior knowledge of the topic were also satisfied in these cases.

The overriding impression from the interviews of STEPS students, after the importance of interest and familiarity with the topic, was the increase in their ability to reflect and comment on what they were doing as they progressed through each assignment and what they were trying to accomplish, especially by the third and fourth interviews. It was evident that the planning and prewriting activities were critical components of the gain for these students.

Some other STEPS students who were not so successful in improving their writing performance, as scored by the primary trait scoring method, nevertheless became more fluent in their writing. They had more to say, but they missed the main point of the task. These students also had more to say in the later interviews about the processes they used, but they seemed to be reciting newly familiar, but not thoroughly understood strategies. As noted in the previous section, some of the students tried to apply "the triangle" to whatever writing they did, even if new planning strategies interfered with the old tool.

Most of the students in both the STEPS and the control groups were clear about what they were trying to accomplish with each piece of writing, even from the start of the school year. The only qualification should be placed on the videogames exercise which required a series of subtasks and was perceived as a contrived project by some of the students.

Another consistent finding was that students in both experimental and control groups did very little editing beyond correction of punctuation and other mechanical errors. Only a few spoke of moving paragraphs around or changing the order of ideas and arguments. This finding persisted throughout the school year for both groups. It would be important for teachers to note whether this was a constraint imposed by limited class time, limited writing time, limited readiness of the student, limited opportunity for the teachers to review so much writing and offer feedback--or whether students were not taught to think of editing their writing in more than superficial ways.

Finally, most of the students most of the time reported that they were pleased with the way their writing had turned out. Very few students criticized their final papers to their interviewer.

COURSE EVALUATION INTERVIEWS

The writing process interviews, whose results were discussed in the previous section, had been designed to probe into the day-to-day teaching and learning activities which influenced students' performance on the writing tasks. In a sense, the process interviews asked "micro" level questions. As a complement to these interviews, more global, "macro" level questions were used in end-of-course interviews to find out how students evaluated their broader learning with the STEPS curriculum. The end-of-course interviews had provided very helpful insights in previous STEPS evaluations. It was decided to continue the same general format, because it had been so sucessful and because it might enable some limited comparative analysis between current and previous STEPS classes.

Two students were randomly selected from each of the four experimental STEPS to participate in the end-of-course interviews. Students who had participated in the writing process interviews were excluded from consideration because they had already devoted considerable class time to being interviewed and because we wanted responses that did not presume the interviewer's knolwedge of

previous information. The final course evaluation interview was individually administered to 16 STEPS students. No effort was made to interview the control students because comparisons between STEPS and English or foreign language instruction were not appropriate.

Findings from the end-of-course interviews are reported in the following sections corresponding to the major themes addressed in the interviews: the perceived purposes of the course; relative emphases; self evaluation of benefits derived from the curriculum; features of the STEPS classes as compared to other classes the students take; and students' recommendations regarding future use of the curriculum.

Perceived Purposes of the Course

As noted earlier, the STEPS curriculum was adopted as the major component in a remedial language arts course for eighth graders in the junior high school providing the field site. The students did not identify the "STEPS" curriculum under that name; instead, they called the remedial course by the title "Reading-Writing Workshop." The questions in the section of the interview on perceived purpose of the course were designed to inquire what the students saw as the purposes of the course but also to find out how much of the emphasis in the course was on STEPS activities and how much was on reading logs and other non-STEPS activities.

The students offered a variety of responses regarding the purpose of the course, but almost all were consistent with the objective for STEPS expressed by the curriculum developers. Students saw the course as one which was supposed to help them with writing, problem solving, reading, analogies, and mystery problems. In response to the next question asking the students to explain how they would describe the course to a friend, the students elaborated on their responses to the previous question. A few saw the course as "an easier English class," or a course to help you with English class,"because here they teach you how to write and in English they assume you know how." Almost all of the students injected personal evaluations of the course when they responded to the description for a friend.

> It's not like other courses. It's a lot different. There aren't as many tests. She helps us out a lot. We do a lot of writing, 75 pages per week, but it's not that much.

> It's easy but not a pushover. It's easier than a foreign language. It helps with writing skills. It easier because you do a lot of things together.

> You do writing assignments, read plays, do logs. Some days it's just boring. Other days she works us really hard.

I liked it. It's interesting. Teaches you a lot. It's hard, a lot of writing, thinking about what you're writing. You can't just write it out; you must use a rough draft and planning to get into the story.

It's a course to develop your skills in English. It's interesting, but not <u>that</u> interesting.

You do trick problems, read 75 pages each week, then do a log. You do writing assignments every three weeks. It's stupid that you need to do that triangle for writing. It never helps.

It's very helpful. It really is. If you have problems in reading , writing, or problem solving, it helps. In other courses too.

Almost all of the students said that their teachers described the course to them at the beginning of the year. A few couldn't remember. Almost half of the respondents offered that the teacher continued to remind them of the purposes of the course and particular activities as they went along.

Relative Emphases on Reading, Writing and Thinking

It was important to STEPS developers to find out how the new curriculum would be fitted into the school's program. They wanted to know at an operational level how the teachers fit the STEPS and non-STEPS pieces together since it had been agreed that the STEPS curriculum would be only two-thirds of the new course. The STEPS developers also wanted to know if the students were able to see connections between the various components of the course. The line of questioning was important as a way of monitoring just what was the nature of the treatment which the students actually received. (This information was especially needed because the classroom observations as envisioned in the evaluation design could not be completed.)

It was discovered in the first few interviews that students had difficulty assigning percentages to gauge the time spent on different activities; their figures did not approximate 100%, or they simply couldn't respond. Instead, the interviewer asked students to rank order the emphases on reading, writing, thinking, or any other activity. With very few exceptions, students rated reading as the most frequent activity in the course and writing a close second. One of the students who noted greatest emphasis on writing explained that the reading they did for the course was completed as homework, not during class time. Thinking, planning, and problem solving activites were combined in a category which received third most emphasis in the students' estimation.

The students were asked to illustrate the categories of activities--reading, writing, and thinking--with specific examples. For reading activites, the students named reading books amd plays aloud, reading at home, and answering questions on worksheets. For writing, they listed writing tasks and other STEPS writing assignments as well as "doing our reading logs" (summarizing their reading from the night before or the previous week). All references to specific thinking activities given by the students could be recognized as STEPS problems, exercises, and activities. When asked if there were connections made between these areas in the course, one student said the connection between reading and writing should be obvious, and one couldn't understand the question despite several rephrasings. However, almost all the students felt there were very few connections made between the reading, writing, and thinking components of the course. Reading and problem solving were connected, as were the planning and writing activities on specific assingments. But there were no connections between the two major components of the course, reading and writing.

Finally in this group of questions, the students were asked to describe a typical class period. There was striking uniformity in their responses to this question. Virtually all the students mentioned their reading logs as the activity which took up the

first 10 to 15 minutes of each class, i.e., writing summaries of what they had read at home since the previous class. It was apparent from their explanations that what followed depended largely on what unit they were doing in the STEPS curriculum.

> "It's all premeditated. Come into class. Work on reading logs. Start working on a writing assignment or prepare for a test. We do group work on opinion topics (preparing for writing). It varies a lot."

> "We'd start off Tuesday and Thursday doing reading logs. Then, depending on what we're into -- writing or problem solving -- would be the rest."

> "Grab your reading log. Write what you read or when you plan to finish (75 pages per week). Then we have writing assignments which we discuss with friends. If it's due and your're on your rough draft, the teacher gives you a lot of choices. You can take it home or work after school.

> "We'd write a log, then we'd find out about the rest of the day. Usually we'd have a discussion before writing a story, like with drunk driving."

Self Evaluation of Benefits from the Curriculum

Improvement in Reading and Writing

In the next set of questions, the students were asked whether the Reading/Writing Workshop (the title by which they know the course) had helped them in reading, writing, thinking or problem solving, and if so, how. A few mentioned "careful reading," and "looking for clues," but most cited improvements in writing. Their responses were sure and detailed.

> "Writing!. The process of discussion helps. You get hold of a subject before your going to write so you know well what to say. You have something to say instead of aimlessly going into a topic and not get anything out of it except a grade."

> "It helped my writing in English and in science. It gives you ways to study and outline. With writing assignments, we learned how to plan out the main idea of the story."

> "It helps me write better. I understand more what I'm writing. The problem solvings help me plan out what I'm doing better."

"I can understand what we're writing and how to go about it. The course gave me the notion of audience."

Transfer Value of Course Outcomes

Fully three-quarters of the students interviewed for course evaluations claimed that the Reading/Writing Workshop helped them learn better in other areas of the school program. Almost all of these students named help for their English classes, and several mention help for science and for social studies. Some cited specific skills such as writing, note taking, putting things into categories, and organizing ideas. Others named specific assignments or topics within other courses: the Romeo and Juliet assignment in English; the El Salvador/Central America debate in Social Studies (to debate "based on sound facts"); social studies journals; the assignment on Russia.

Only four students responded negatively to the question about the transfer value of the course. One could only note that books read for the Reading/Writing Workshop course counted for English too. Another explained that "You don't do problems like that in other courses." Both of these students contradicted these responses in the next set of questions on affective outcome of the curriculum when they noted the course made writing assignments easier and helped with "thinking up ideas, pre-writing, and planning." It may be that these two students did not understand

the concept of transfer value. The remaining two students who say there was no benefit to other areas in or out of school were students whose entire interview responses were very negative about school in general.

Affective Outcomes of the Course.

It has always been important to the STEPS developers to assess the affective outcomes of the STEPS curriculum. Indeed, the promotion of a positive attitude toward learning and the development of a positive self-concept are major underpinnings of the Waters curriculum. The set of questions on affective outcomes inquired about improvements in the students' confidence in their academic abilities, motivation, stamina for more difficult assignments, and independence in learning, as well as decreased fear of writing and reduced stress in the process of writing. Even students who claimed there were no positive benefits from the curriculum in the previous sections responded positively with extended responses to the questions on affective outcomes. One such student responded:

> "Before I'd never make a plan first before writing. Now I do.... Oh, yeah! On problems, I'd try really hard to do them, then ask (but not give up). (Regarding ease of writing) the plan makes it easier. If I have a good topic, I can do it. We've had good

> topics all year except videogames....Yeah, I'm more independent now, in other classes too."

As noted in the previous section, 75% of the interview respondents had evaluated the course as one that helped them with the cognitive skills in reading, writing, and problem solving. All of these students also noted affective benefits from the course but they were careful not to make sweeping claims for the course. Their answers were tempered, qualified, and usually focused on performance in writing, as illustrated by the following responses.

> "I know I can write better and it's a lot easier....Yes, if there's something hard I'll try it. If I mess up, it's OK. (Regarding becoming more independent as a learner) Yes, The teacher helps you but she doesn't give you the answer. You really have to think about what you want to say."

> "Yes. When I got stuck before, I didn't know what to do. Now I know how to look back and see the facts. (I'll try more difficult assignments) but it depends on the topic. Some are boring.... Once I get started, I can stay with it. (I'm more independent) in some ways, but I still need help with problem solving.

> "Now I don't get frustrated with writing. The course make it easier to write on a subject you don't really want to do. You look at it and think of good ideas to write. (It's made me more independent) because usually you want the teacher to tell you the answer. She won't tell you but says 'go back to page 10 and find the answer.' She will tell you if you really can't get it yourself."

Teaching Style with STEPS

Students were asked if the STEPS course was taught differently from the other courses they take. All but one of the respondents indicated that there was a difference. Asked to say what that difference was, two students who could not explain the nature of the difference but insisted that the course was taught differently. Most of the students' answers portrayed a supportive, relaxed atmosphere in which the teacher provides a great deal of individual and group assistance as well as several options for completing assignments.

> "It's nothing like .... She gives us help; makes it easier. She helps us make lists of things to put in writing assignments. She helps us plan it."

"In most classes you have to be quiet. This one is more relaxed."

"This one's a lot different. Most of the time other teachers just give directions and tell us to go to it. She (STEPS teacher) will take a whole period to explain a writing assignment. She gives us more time to write and explains more."

"The teacher can always come around and help us individuals. In some other courses if you raise your hand, the teacher tells you to put it down. I like this because if I need help she can come right to me. The course needs teachers wil abilities in how to help students solve problems."

"In this class you get more time to talk. In other courses you can't . Also, in other courses you don't get choices. Here you can be flexible. You have the freedom to chose where and when you will finish the assignment."

"Yes, definitely. There's more independent work. The teacher will come around if you need help but she doesn't stand at the chalk board the way they do in most classes. We work a lot in class, so there's not

> much homework. I like learning independently. The teacher is there to help. In other classes and at home there's no help from a person who knows."

The teacher's ability to be patient and explain in detail were characteristics most frequently cited by the students as important ones for a teacher of the STEPS course.

> "He doesn't rush the classes. He explains in detail and helps individuals."

> "The teacher has to have a lot of patience. The people she talks to are having problems. In other courses the teachers don't worry about students' questions."

It had been the evaluator's plan to inquire if the students felt their STEPS teachers used the same or different approaches in other classes they taught. However, none of the students in the interview sample had their STEPS teachers in other courses as well.

Student Interactions in STEPS Classes

The course evaluation interview included a series of questions which were designed to inquire if students were using each other as resources for learning, and not just relying on the teacher for information, as they would in a traditional classroom environment. Previous evaluations of the STEPS curriculum in both traditional and alternative schools had shown that the STEPS curriculum promoted very positive student-to-student interactions in the views of the STEPS students. That effect was considerably diminished in the 1983-84 STEPS classes.

Most of the students said that the way students treated each other in the STEPS Reading/Writing Workshop classes was no different from the way students responded to each other in other classes. Only a handful of students did think there was a difference which each characterized in the responses given below.

> "You can talk to other kids while you're working. It's good to hear what other kids have to say. It helps to hear how others figure out problems. That doesn't happen in most the the courses I take."

> "There are cliques in the school. In this class they mix."

"Yeah, kids help each other a lot in this class. Some things are easier for some kids and they'll help. In other courses kids keep to themselves."

"Yes, everyone's friendly. The teacher won't tolerate picking on someone. We don't make fun of students for making mistakes. We all make mistakes. Also, you can pick up certain things from the students."

A variety of class arrangments were used for instruction in the STEPS classes, and almost all of the students commented that they changed depending on what assignments they were working on at the time. The most prevalent arrangement appeared to be individual work--on essays, reports, and reading assignments. The next most frequently used arrangement was full class discussion (usually in preparation for a writing assignemnt) or reading a play aloud (an activity which was not part of the STEPS curriculum). The students did work in pairs, but only infrequently, and then on puzzles or worksheets. Small group arrangments of three or more were almost never used, but the class sizes were small.

While some of the students described a different kind of student interaction pattern in STEPS classes as compared to their other courses, the majority of students described the STEPS classroom in terms of teacher-dominated classes discussions and individual work. Data collection as prescribed by the original

evaluation design would have enabled more thorough and objective investigation of the classroom interaction patterns which took place in STEPS classes. However, the STUDENTS observation schedule which is shown in Appendix E was not administered as planned. The evaluation assistants met resistance from the teachers over the heavy demands on class time which the evaluation design seemed to require. Even though the observation instrument should not have diverted considerable class time to its use, especially after the students and teachers were accustomed to the presence of the observer in the classroom, the evaluator and STEPS developers agreed that it was more important to secure teachers' commitment to the collection of writing samples and the conduct of the writing process interviews.

Initial efforts were made to use the STUDENTS observation system with STEPS classes. The few trials which were completed reflected the pattern described by students in the course evaluation interviews. One sample shown in Appendix E illustrates a class in which the teacher was orienting students in full class discussion to prepare for individual work which occupied the second half of the class period. Another sample reflects a pattern of individual work followed by full class review. However, it would not be appropriate to characterize the nature of instruction in STEPS classes with such limited observation. The data is included only for the purpose of illustrating what the observation schedule might reveal if it were used over an extended period of time.

Students' Recommendations for Course Improvement

In the final set of questions on the course evaluation interview, students were asked if they would make recommendations regarding the size of the class, the content and relative emphasis given to each area or skill, and the number of class meetings each week. Regarding class size, almost all of the respondents were satisfied with the class size they experienced with the course. One student whose entire interview had a decidedly negative tone, said:. "No, he'll maybe get to you once." But another student in the same class felt the size was small enough to get personal attention from the teacher. "He always has time for kids. It gives you more confidence knowing someone is there." These two students had been selected at random from the largest class (n=19). Not only did the majority think that their classes were small enough, most felt that getting personal attention from the teacher was important, particularly for writing assignments.

The students' most and least preferred activities in the course varied considerably. They mentioned specific problems, puzzles and analogies in no particular pattern. Since Unit VII of the STEPS curriculum included a course evaluation form addressing some of the same questions, the individual responses are not tallied here. (See Appendix F.) However, two major themes were apparent. There were several intense criticisms of the reading logs as part of the course.

> "I hated the reading logs. Get rid of the reading logs. Most of the kids just read the back of the book anyway. The teacher never quizzes us on the books."

Another simply emphasized: "The reading logs have to go.!" Only one student mentioned the reading logs as an activity she liked. "It's not too much to read 75 pages a week."

The other major theme which was apparent in the students' unprompted recommendations for changes was the choice of topics for the writing assignments. Several noted that it is important to choose interesting topics and made specific reference to the videogames assignment as uninteresting and/or unimportant.

Regarding the relative emphasis on various areas covered by the course, most felt the distribution was "OK." There were four requests for more time on writing, one for more time on problem solving, and three for less time on reading. As to the frequency of class meetings, all but two felt that meeting three times per week was "good the way it is." One student who did not want to take the course at all would have lowered the frequency to two meetings per week. The other student liked the course very much and wanted the class to meet five times a week.

In general, the students were agreeable to being interviewed and thoughtful in their responses. Most were consistent in their responses, but a few were not. The interview schedule included several cross checks and opportunities to verify or expand on students responses, so most inconsistencies could be clarified.

INTERVIEWS AND CONFERENCES WITH TEACHERS

Several opportunites were used to gather the teachers' perceptions on a variety of issues related to STEPS development, implementation and evaluation. These opportunities included: semi-structured interviews with the evaluator; notes from staff meetings; informal conversations at the field site; and extended informal discussions at a national conference attended by the STEPS teachers, developers and evaluator.

The STEPS developers were devoting major attention during the 1983-84 academic year to rewriting and editing the STEPS teachers manual with the view toward publishing and marketing the materials in ways that would be attractive and useful to schools. For financial and practical reasons as well, the implementation of the STEPS curriculum during the 1983-84 academic year was limited to one field site offering four classes taught by two STEPS teachers. No one in the system had used the STEPS curriculum before.

The teachers who agreed to try the curriculum were experienced language arts teachers who were positively rated by their principal and other colleagues. They were "risk takers" as shown by their willingness to try the STEPS curriculum. They were also motivated to improve what they felt had been an inadequate course for eighth-grade students who were in need of remedial

assistance in the language arts. The teachers noted that they were interested in using the STEPS curriculum but also wanted to include reading assignments and some vocabulary work in the new course too.

After a year's experience with STEPS, the teachers remained attracted and committed to the STEPS curriculum, its philosophy, goals, and approach to teaching thinking and writing skills. However, they expressed continuing discomfort with following the teacher's manual closely. Both felt that the manual as written was too confining and too wordy for experienced teachers. They advocated a more streamlined format with better cross-referencing to what student worksheets will be used at various points.

Both teachers wanted to use some exercises and worksheet and exclude others. One was particularly expressive on this point. There were "several good ideas, but the materials weren't me. I'd like to be able to draw on materials I could get excited about, that are engaging to me." But he felt that in some of the present STEPS exercises, the skills were relevant but the contexts were inappropriate or silly for eighth graders. The teachers said they appreciated that their comments were being heard and they looked forward to the opportunity to participate in the revision of materials.

It was apparent to the STEPS teachers and students alike that the reading selections for the Reading/Writing Workshop were not well coordinated with the STEPS portion of the course. Both

teachers wanted to make more careful selections of reading materials for the second year of implementation in their school, the 1984-85 academic year.

The teachers saw benefits for the students which they attributed to the STEPS curriculum but one in particular would have liked a "more formal pretest at the beginning of the year to see where the kids were starting from. The comfort level test is OK for the kids, but the teachers need a more objective assessment."

The strongest and most pervasive theme in the interviews and other coversations with teachers was the sense of professionalism and collegiality which they felt was promoted by their involvement in the STEPS curriculum development and implementation. The "biggest plusses were teaming with another teacher; having time to preview materials and talk about their use with other professionals; being encouraged to reflect on how things were working; seeing research on curriculum advancements and where STEPS fits in; and gaining the confidence of the administrative folks." One teacher very hesitantly and then directly acknowledged the financial compensation for the summer workshops as a benefit she appreciated. The other offered that the STEPS manager played a very "important and legitimate role, checking in periodically to see how we were doing. That was helpful talking to her about individual lessons."

The culmination of this promotion of professionalism in the eyes of the STEPS teachers was the support they received to attend the national meeting of the Association for Supervision and Curriculum Development in New York City, March 1984, and the International Conference on Thinking hosted by Harvard Graduate School of Education in August, 1984. At the former meeting, the STEPS developers and evaluator participated in a symposium on the development and evaluation of a thinking skills curriculum; the teachers attended with support from the Waters Foundation. The latter meeting was attended by the two STEPS teachers and several of their colleagues who were also interested in learning more about current programs and research on improving students' skills in higher order thinking. Their participation was encouraged and supported financially by their school administration.

RECOMMENDATIONS

These recommendations from the 1983-84 evaluation are being provided formally in August, 1985. However, it is important to note that much of the information was relayed before the formal report could be delivered, and the developers have already begun to respond to the suggestions. In addition, it should be noted that the STEPS development team had come to some of the same conclusions from different perspectives and independently of the curriculum evaluator.

The recommendations are grouped according to their primary emphasis: curriculum development, teacher training, or dissemination of the STEPS curriculum. Several of the recommendations pertain to more than one category.

On Curriculum Development

1. Explain more clearly in the teachers' manual the purposes of the various exercises in the STEPS curriculum, particularly those in Units II and III. Retain only those exercises, puzzles and problems which promote a skill central to the purpose of the unit. Encourage teachers to select from various options a set of exercises which they feel will be appropriate for promoting the desired skills with their students.

2. Choose the topics of writing assignments with utmost care. The interest and prior knowledge which the students bring to a writing assignment appear to be the most important variables affecting their performance on any writing task. No single assignment will appeal to everyone, and it is sometimes appropriate to challenge students to research and write about new issues. However, for poor writers, topics enabling optimal performance should be used frequently.

3. Retain writing assignments in the curriculum which seem to have worked well. Former students' papers can be used anonymously to illustrate good and poor writing. The continuity will also enable comparative analysis across cohorts of students in the system.

4. Consider using one of the NAEP writing topics as a regular part of the STEPS curriculum, so that comparisons might be made between the writing performance of STEPS students and a national reference group. Meaningful comparisons cannot be made on different writing assignments. The NAEP assignment for 13-year olds would be appriopriate for STEPS students. "Imagine that your principal asked for suggestion about how to make things better in your

school. Write a letter to your principal telling just ONE thing you think should be changed, how to bring about the change, and how the school will be improved by it."

5 Use the computer application for data collection and file management in the STEPS curriculum only if certain conditions are met: the research and writing project is clear and cohesive, and the thrust of the assignment is understood by the students; the computer equipment is accessible to the STEPS teachers and students when it it is needed; a resource person who is experienced in the application of the software is available to help the STEPS teachers prepare and conduct the computer sessions until the STEPS teachers can act alone; the computer is seen as a tool to facilitate the research and writing project and not just a diversion from the main purposes of the course.

6. Coordinate instruction in word processing with the STEPS curriculum, optimally Unit IV, so that students will be able to edit their writing in more than superficial ways without the tedium of copying and recopying by hand. Word processing is the computer application which appears to have great potential for enhancement of writing with the STEPS curriculum.

On Teacher Training

7. Continue the involvement of STEPS teachers in the review and revision of the curriculum materials. This practice promotes the teachers' sense of professionalism, sense of commitment to the curriculum, as well as their insightful appraisal of the materials. Their participation in curriculum revision is likely to lead to more accomplished use of the materials. These experienced and committed STEPS teachers can serve as master teachers to new STEPS teachers.

8. Alert teachers that some students are not selective about prewriting strategies which can be useful with various kinds of writing tasks. Some of the students have tried to apply two or more guidelines for the same assignment, and dissonance ensues. Their writing appears confused and their oral accounts of what they were thinking suggest confusion as well. Teachers should emphasize that there are a variety of ways to plan and organize ideas, and the method should depend on the assignment. Reflection on the planning paradigm(s) should be a part of the class discussion in which ideas are shared for a particular assignment. Teachers should discuss with students how different planning schemes are helpful for different writing assignments, e.g., list of

school. Write a letter to your principal telling just ONE thing you think should be changed, how to bring about the change, and how the school will be improved by it."

5. Use the computer application for data collection and file management in the STEPS curriculum only if certain conditions are met: the research and writing project is clear and cohesive, and the thrust of the assignment is understood by the students; the computer equipment is accessible to the STEPS teachers and students when it it is needed; a resource person who is experienced in the application of the software is available to help the STEPS teachers prepare and conduct the computer sessions until the STEPS teachers can act alone; the computer is seen as a tool to facilitate the research and writing project and not just a diversion from the main purposes of the course.

6. Coordinate instruction in word processing with the STEPS curriculum, optimally Unit IV, so that students will be able to edit their writing in more than superficial ways without the tedium of copying and recopying by hand. Word processing is the computer application which appears to have great potential for enhancement of writing with the STEPS curriculum.

pros and cons; "the triangle" for encouraging different points of view on the same subject; and an outline of the chronology of events.

9. If the students are ready, and the time permits, teachers should be taught to teach rewriting skills with STEPS. Students have benefitted from instruction in planning and prewriting, but their editing of rough drafts has been limited almost exclusively to correction of mechanics--spelling, punctuation, and capitalization. Of course, this is an issue for curriculum development as well. In addition, major editing would be much more feasible if the students had access to word processing.

10. The STEPS teachers should be made more conscious of the benefits of student-to-student interactions in their classrooms. Previous evaluations of the STEPS currciulum have shown that students learn from hearing other students explain a problem or a solution. In these earlier student interviews, it was found that hearing other students think aloud how they solved problems was very helpful to many students. Use of the STUDENTS observation schedule to monitor what kinds of classroom interaction patterns take place would be helpful not only for program monitoring but also for training teachers to encourage student participation.

On Marketing and Dissemination of STEPS

11. There is evidence that the STEPS curriculum is effective for improving students' skills in expository writing and that it seems to be placed appropriately in a language arts sequence. However, if other areas are joined to the STEPS curriculum, the additions should be made only if they are consistent with the major thrust of the STEPS curriculum. STEPS students were aware that many skills contributed to writing and problem solving but they were appropriately critical of activities which bore no relationship to other parts of the course.

12. The STEPS developers should try to implement STEPS in schools which promote staff development, encourage colleagial interaction among teachers and have the support of a building administrator. If the curriculum is to survive it must find a legitimate place in a school's program, gain the support of a team of teachers, two or more, who are trying to improve curriculum and who have the support of their principal.

APPENDIX A

QUESTIONS ADDRESSED BY THE EVALUATOR

QUESTIONS ADDRESSED BY THE EVALUATION

Focus of Question	Source of Data
Regarding student performance and learning processes:	
1. Is the STEPS curriculum effective in improving students' performance in expository or persuasive writing?	Writing Tasks and Primary Trait Scoring
2. What thinking strategies do the students employ in preparation for writing, as well as during writing and rewriting?	Student Interviews on Thinking and Writing Processes
3. Do the thinking strategies students employ change over the course of the year?	Student Interviews on Thinking and Writing Processes
4. What teaching and learning experiences in the STEPS curriculum are seen by the students as enablers for improving thinking strategies and for writing?	Student Interviews for Course Evaluation
5. How long must the STEPS curriculum be used, and with what intensity, before improvements can be noted in students' thinking strategies, writing performance, and in their confidence in undertaking writing assignments?	Writing Scores; Student Interviews; Teacher Interviews
6. Does any improvement in thinking strategies and/or increase in writing proficiency during the STEPS program transfer to students' performance and confidence in undertaking assignments in other courses?	Student Interviews for Course Evaluation; Teacher Conferences and Interviews
Regarding <u>teacher</u> behaviors and classroom interactions:	
7. How closely do the STEPS teachers follow the curriculum guide; what additions, omissions, or other changes would they recommend in the suggested activities; what is their pace of instruction?	Teacher logs; Teacher Conferences; Teacher interviews.
8. When they use the STEPS curriculum, do teachers adopt different styles from those they employ in teaching other subjects?	Student Interviews for Course Evaluation; STUDENTS Observation system; Teacher Interviews
9. What teacher-to-student and student-to-student interaction patterns take place in the STEPS classes; how do these differ from patterns observed in other classes with the same teachers?	STUDENT Observation System; Teacher Interviews

A (cont.)

QUESTIONS ADDRESSED BY THE EVALUATION

Regarding teaching behaviors:	Source of Data
10. How is the time apportioned among various instructional activities in STEPS and non-STEPS classes?	STUDENTS observation System
11. How long must teachers use the new curriculum before they are confident in using it? What initial training and continuing assistance must be provided to teachers?	Teacher Conferences; Teacher Interviews
12. What kinds of teachers should be encouraged to try the STEPS curriculum, under what kinds of circumstances?	Interviews with Teachers, Team Leaders, Administrators
Regarding school-wide issues:	
13. How is the new program placed in the larger school program; how many units or credits are assigned to the course; is it integrated with other existing programs of an English or language arts sequence; how is the new curriculum announced to parents?	Interviews with Teachers, Team Leaders, Department Leaders and Administrators

APPENDIX B

PRIMARY TRAIT SCORING GUIDES

1. T.V. Watching Letter
2. Movine Rating Essay
3. Videogames Essay
4. Washington Trip Letter

WRITING SAMPLE

The PTO asked Mr. Schaye to [illegible] parents a policy about students watching TV on week nights. Before he made his policy, Mr. Schaye wanted to hear from students.

Write a letter to Mr. Schaye describing the reasons for and against allowing students to watch TV on week nights. Then describe what policy you would recommend. Give reasons for your recommendations

"AGAINST -

I'm against policy
because it should
be up to the parents to decide how much t.v.
students watch. and because it really doe
matter because almost everyone turns
in there homework each night.

WITH - I am also for the policy

because some students don't get
homalwork done because of T.V.

RECOMMENDATION - If I was you I think
I would recommend to the parents that
students should not all [illegible] of their

2 = Describe the issue and offer a minimally defended policy or opinion. Some papers might give an elaborage discussion of the issue, but the policy suggested is a personal one, derived partially from the arguments but not really helpful to developing a school-wide approach. In other papers the reasoning tends not to be developed; all components are present but are in a sketchy, skeletal, rudimentary form that is basically a bare outline. Others are disjointed or the ideas are not related (the policy does not address the issues; the policy does not take into consideration value as a school-wide policy). In other papers the writers' point of view of the issue dominates the discussion of the issue, giving a skewed picture of the issue even though all components are present.

3 = Describe the issue and defend a policy. In these papers, all of the conditions of the assignment are at least minimally met. Papers describe the issue and suggest and defend a policy. Reasoning is used to expand or explain one of the two main elements (the issue or the policy). For example, there might be a detailed description of a possible policy with reasons for its acceptance or an elaborate explanation of the problem. Usually one element is well developed while the other is only asserted (or barely mentioned) resulting in an unevenly developed paper.

Occasionally a "3" paper gives a very balanced, well-documented picture of the issues and implies the suggested policy without stating it outright. The excellent presentation of the issues carries it over into the category demonstrating competence.

4 = Systematically describe the issue and defend a clearly reasoned policy. These papers would have all the positive elements of "3"'s with these additions:

- The description of the issue and the policy would clearly be linked to each other.
- The policy would be a logical step from the discussion of the issues.
- Both pro's and cons of television watching would be presented clearly and substantiated by illustrative examples, clear reasoning, etc.
- The letter would suggest sensitivity to the process of establishing such a policy.
- The letter casts the ideas in a systematic structure.

(b) Position statement is contradicted by the evidence.

(c) Position statements but no related support--often these papers merely reiterate their stand in various forms.

(d) Position statements preceded or followed by elaborate introducti

(e) Position statements followed by arguments and appeals not conne to the crucial issues.

(f) Position statements but the paper goes off tangentially into ar realm (clarifying terms, personal gripes, etc.)

2 = Define a point of view and offer a minimal defense. These papers ex state or strongly imply a position but either give only one reason if developed) or give 2 or more reasons that are undeveloped. Score "2" papers often consist of a chain of undeveloped arguments. Unlik score point "1" papers, the arguments in score point "2" papers are to the position they've taken. Some score point "2" papers might h both a clearly stated position and developed arguments, but they do not demonstrate the ability to develop a coherent paragraph in support of a topic sentence; the development of the arguments in t papers is, therefore, confusing to the reader.

3 = Define and defend a point of view. These papers make their positio and present several well developed arguments in support of their po The position can be supported through evidence or appeals to genera to experience, or to social, economic, or personally held values. T papers reflect the ability to develop a coherent paragraph in suppo a topic sentence. They do not, however, demonstrate adequately the to organize the paragraphs into an overall organizational framework discernable to the reader.

4 = Systematically define and defend a point of view. These papers incl of the characteristics of score point "3" papers. In addition, they present their arguments in a rank ordered organizational framework discernable to the reader through the use of transitional sentence phrases, or words, and/or linking of topic sentences. If a paper me of the criteria for a score point "4" paper except that it was pres in a clear organizational framework other than rank order (e.g. by of argument), it could still receive a score point of "4".

PRIMARY TRAIT SCORING GUIDE

"Movie Rating" Essay

Topic: A rating system now exists for movies. Restrictions are placed on movie viewers according to age. Write an essay explaining why you think the rating system is important or why you think it should be changed. This will be an opinion essay. Decide whether you want to start with the least important idea and build up to your strongest. Consider giving the strongest argument first.

Primary Trait: Expression of an opinion on a social issue supported by several thoughtful reasons that are organized to reveal their relative importance.

Rationale for Primary Trait: Students can derive the direction for their papers from three key statements in the topic: "Explaining why you think the rating system is important or why you think it should be changed;" "Decide whether you want to start with the least important idea and build up to your strongest; consider putting the strongest argument first;" and "This is an opinion essay."

.The "or" clauses of the first statement suggest that students should take one point of view rather than present both sides of the issue (unless their point of view is that they're undecided). "Explaining why..." suggests that students must back up their opinion with reasons. Implicit in the second statement is the need to have several arguments to back up their position. In addition, the statement calls on students to develop an organizational framework for their arguments: from least to most important or most to least important. The final statement alerts students that the primary emphasis of this writing will be expressive rather than persuasive. As a result, students should concentrate on being truthful and honest to the writer "voice" rather than on focussing on the feelings, thoughts, or responses of the audience.

General Scoring Rationale: A position must be clearly taken in the paper; the position can be for, against, or undecided. Support may consist of evidence and/or appeals to general truths, to experience, or to social, economic, or personally held values. The support must be consistent with the position and be of at least moderate length to demonstrate competence (scale point "3"). Excellence is achieved by demonstrating the ability not only to support opinion with thoughtful, well-presented arguments, but by presenting those arguments in an order reflective of their importance to the writer that is made apparent to the reader through transition phrases, signal words, and/or topic sentences.

Scoring Guide Categories:

0 = No response.

1 = Do not define and defend a point of view. Some of these papers have not explicitly or implicitly taken a position. Others may contain a thesis statement or clearly imply a position but do not give several supporting reasons to develop their arguments. Some typical score point "1" papers present:

(a) Attitudes and opinions about related social issues without a clear statement of position--these include free-floating, uncontrolled statements of opinion showing no concern for taking a stand and supporting it.

PRIMARY TRAIT SCORING GUIDE

"Video Games" Essay

Topic: Write an essay presenting your opinion on one of the issues surrounding video games. Show how the data collected from the class questionnaire supported your opinion, changed your original opinion, or disagreed with your opinion but did not change it.

Primary Trait: Reasoned presentation of an opinion/hypothesis about social behavior and a clear, thoughtful discussion of the role of research data in reinforcing, modifying, or changing the hypothesis/opinion.

Rationale for Primary Trait: Students can derive the direction for their papers from two key statements in the topic: "...presenting your opinion on one of the issues surrounding video games;" and "Show how the data collected from the class questionnaire supported your opinion, changed your original opinion, or disagreed with your opinion but did not change it."

The first statement indicated that students should choose only "one" position on an issue about video games; "presenting your opinion" suggests that the opinion should be clearly expressed and possibly elaborated upon for the reader.

The second key statement, "Show how the data...supported...changed your original opinion...," suggests that the original opinion should be stated in such a way that it can be confirmed or refuted by data (probably as a prediction, hypothesis, or question). The second statement also calls for an analysis/discussion of the data as it affects the student's original opinion. The relationship of the data to the original opinion must therefore be clear to the reader.

Since the topic calls for the presentation of an opinion and its verfication through data analysis, this paper is more concerned with clarifying the thoughts of the writer and informing the reader than with persuading the reader. As a result students should concentrate on being truthful and honest to the writer "voice" rather than on focussing on the feelings, thoughts, or responses of the audience.

General Scoring Rationale: A position must be taken in the paper and must be stated in such a way that it can be corroborated by data. In a competent paper, the writer's rationale for the original opinion will be conveyed. In addition, a discussion must be included about the degree to which the data supports the initial position and why. To demonstrate compentence (scale point "3") all of these components must be present and adequately elaborated. Excellent papers (scale point "4") will not only include all of the qualities of a scale point "3" paper but will be able to pull these elements together into a coherent organizational structure that makes the parts of the paper work together as a whole (through the use of transition phrases, topic sentences, etc.).

Scoring Guide Categories:

0 = No response.

1 = Incomplete presentation. Some of these papers have not made their opinion clear. Others may present a discussion of data that does not relate to the opinion. The papers evidence poorly organized or controlled thinking through the failure to form clearly related arguments or discussions. Some typical scale point "1" papers present:

name _____

WRITING ASSIGNMENT: Rating Systems at Movies

A rating system now exists for movies. Restrictions are placed on movie viewers according to age.

TASK: Write an essay explaining why you think the rating system is important or why you think it should be changed.

PRE WRITING: What are the restrictions and ratings at movies? How are the restrictions enforced?

PLANNING: Sketch a Δ. List as many reasons as you can for why you agree with agree or disagree with the idea of a rating system. Sort your reasons with the most important noted. You will be developing this personal set of reasons into an opinion essay.

ROUGH DRAFT: Prepare an essay stating your opinion. Decide whether you want to start with the least important idea and build up to your strongest reason. Consider giving the strongest argument first.

REVISION: Is your essay clearly organized? Are transition words or phrases used?

EDITING: Do you include topic sentences? Do you use a dictionary when needed?

FINAL COPY: white-lined paper, pen, alternate lines

ROUGH DRAFT Due: _____

FINAL COPY DUE _____

ESSAY ON VIDEO GAMES

TASK: Write an essay presenting your opinion on one of the controversies surrounding video games and show how the data collected from the class questionnaire supported your opinion, changed your original opinion, or disagrees with your opinion but does not change it.

PRE-WRITING:
a) Choose one of the controversial questions about video games that interests you
b) Think about hoe you feel about the question. Write down your opinion.
c) Make a prediction about what the data will show (it might be the same as your opinion).
d) Collect and analyze the data from the questionnaire that relates to your controversial question.
e) Revise or expand your opinion based on the data.

PLANNING: Develop an outline of how you are going to organize your essay. Be certain to include:
a) The question you are addressing
b) Your original opinion/position on the question and your final opinion if it has changed.
c) What the data indicates about your original position (does it fully support it? partially support it? disagree with it?)
d) Elaboration (Why do you think this finding is true or how the data influence you to change your position; or why the data does not change your opinion even though it disagrees with it)

ROUGH DRAFT: Prepare an essay from the outline you developed.

REVISION:
a) Criticize your rough draft: it is clear? is it complete? Have I fairly represented the data? Have I expressed my position and described how the data supported it or influenced it clearly enough so it will make sense to someone else?
b) Check your draft to be sure that:
- the data you're presenting relates clearly to your opinion
- you analyzed the data carefully and presented it fairly (you didn't ignore parts of it because it didn't agree with your position)
- you gave specific reasons for the position you're taking after analyzing the data.
- your points all clearly relate to your topic.
c) Have someone else read your paper and give you suggestions if you have time

EDITING: Try to have no more than 3 technical errors (grammar and spelling); consult with a dictionary or someone else to help you with this.

FINAL COPY: White-line paper pen, alternate lines

Rough Draft Due: _____

Final Copy Due: _____

(a) Opinion statement is unrelated to the presentation and discussion of data.

(b) Opinion is contradicted by evidence with no attempt to explain difference.

(c) Opinion statement is elaborated upon but data is not referred to.

(d) Opinion is stated, minimal attention is given to related data, but a significant portion of the paper goes off tangentially into another realm (clarifying terms, personal gripes, etc.)

2 = Paper components present but minimally developed. The line of thinking, with opinion statement and discussion of data, is clear to the reader. However, the presentation of the thinking is incomplete. Either the opinion statement is not clearly presented or supported or the data analysis is sketchily developed. Some typical score point "2" papers may present:

(a) a thorough analysis of the original opinion and minimal attention to the data analysis (though what is presented is germane).

(b) a thorough analysis of the data but no reasons given for the writer's initial opinion--either implied or explicitly stated.

(c) clearly presented but completely undeveloped opinion and data analysis.

(d) clearly presented opinion and data analysis but no demonstration of ability to develop a coherent paragraph in support of a topic sentence; the development of arguments and explanations in these papers is therefore confusing to the reader.

3 = Paper components developed. These papers make their opinion clear and present several reasons for their position. In addition, they present adequate explanations of any differences between the data and their position or work data that supports their position into their paper. These papers reflect the ability to develop a coherent paragraph in support of a topic sentence. They do not, however, demonstrate adequately the ability to organize the paragraphs into an overall organizational framework clearly discernable to the reader. It is possible for a scale point "3" paper to have a solidly supported opinion statement and thorough explanation of the data and then a weak or poorly connected concluding paragraph.

4 = Paper components systematically developed. These papers include all of the characteristics of scale point "3" papers, except that, while scale point "3" papers' explanations may be adequate, scale point "4" papers' explanations of data must be sharply focussed and complete. In addition, they [illegible] these components in an organizational framework that can be defined by the reader through the use of transitional sentences, phrases, or words and/or linking of topic sentences.

(a) attitudes and opinions about related issues--these include free floating, uncontrolled statements of opinion--without a recommendation relevant to the assignment;

(b) a recommendation but no related support--often these papers merely reiterate their stand in various forms;

(c) a recommendation unrelated to the presentation and discussion of alternatives;

(d) a recommendation contradicted by the discussion with no attempt to explain the difference;

(e) a recommendation and minimal presentation of alternatives, but a significant portion of the paper goes off tangentially into another realm (clarifying terms, personal gripes, etc.)

2 = Paper components present but minimally developed. The line of thinking, with the presentation of alternatives and a recommendation, is clear to the reader. However, the presentation of the thinking is incomplete. Either the recommendation is not clearly presented or supported or the alternatives are sketchily developed. Some typical scale point "2" papers may present:

(a) a thorough analysis of the recommendation and minimal attention to the presentation of alternatives (though what is presented is germane);

(b) a thorough analysis of the alternatives but no reasons given for the writer's recommendation--either implied or explicitly stated;

(c) clearly presented but completely undeveloped presentation of alternatives and recommendation;

(d) thoroughly stated analysis of alternatives and recommendation but no demonstration of ability to develop a coherent paragraph in support of a topic sentence; the development of arguments and explanations in these papers is, therefore, confusing to the reader.

3 = Paper components developed. These papers make their recommendation clear and present several reasons for their position. In addition, they present an adequate and clear [illegible] of the alternatives. Their recommendation follows from their discussion of the alternatives. These papers reflect the ability to develop a coherent paragraph in support of a topic sentence. They do not, however, demonstrate adequately the ability to organize the paragraphs into an overall organizational framework clearly discernable to the reader. It is possible for a scale point "3" paper to have a solidly supported recommendation statement and thorough analysis of the alternatives but a weak or poorly connected concluding paragraph.

4 = Paper components systematically developed. These papers include all of the characteristics of scale point "3" papers, except that, while scale point "3" papers' discussion and support may be adequate, scale point "4" papers' discussion and support must be sharply focussed and complete. In addition, they present these components in an organizational framework that can be defined by the reader through the use of transitional sentences, phrases, or words and/or linking of topic sentences.

PRIMARY TRAIT SCORING GUIDE

"Washington Trip" Letter

Topic: Write a letter to the House Leaders describing your impressions of what New York City offers and of what Washington, D.C. offers to visiting students. Then indicate your recommendation for which city or cities should be included in next year's trip. Give reasons for your recommenation.

Primary Trait: Persuasion through invention and defense of a recommendation linked to a thoughtful discussion of the alternatives.

Rationale for Primary Trait: Students can derive the direction for their papers from the three key statements that comprise the topic instructions. In the first statement, "describing your impressions of what...offers to visiting students," requires the writer to consider what the cities offer to students in general rather than simply reacting personally to each city. In addition, the first statement identifies specific individuals as the writer's audience.

The second statement, by asking the writer to make a recommendation for action, establishes the purpose of the letter as persuasive. Since the writer will be trying to convince the House Leaders to follow a course of action, awareness of the audience becomes important. The recommendation the writer is asked to make is qualified. Although the writer creates the recommendation, it must concern a choice of cities to visit next year.

The last statement makes clear that the recommendation must be supported with reasons. In order to be persuasive, the recommendation should logically follow the discussion of the alternatives.

General Scoring Rationale: Since the directions for this exercise seek to elicit reasoned and systematic methods of persuasion and explanation, papers should be scored in terms of these efforts alone. Matters such as tone or letter form should not be weighed in scoring. In order to demonstrate competence (scale point "3") papers must include an adequately elaborated presentation of the alternatives and a supported recommendation. The recommendation will be derived logically from the discussion of the alternatives and will clearly be an expression of group need, not an extension of the writer's wishes. Coherent paragraphs must be apparent. Excellent papers (scale point "4") will not only include all of the qualities of a scale point "3" paper but will be fully elaborated and will pull these elements together into a coherent organizational structure apparent to the reader that makes the parts of the paper work together as a whole (through the use of transition phrases, topic sentences, etc.)

Scoring Guide Categories:

0 = No response.

1 - Inadequate presentation. Some of these papers have not made their opinions or recommendation clear. Others may present a discussion of the cities that simply elaborates on their own attitudes rather than considering them in light of group needs. The papers evidence poorly organized or controlled thinking through the failure to form clearly related arguments or discussions. Some typical scale point "1" papers present:

WRITING SAMPLE

This summer the House Leaders will discuss this year's 8th grade trip and make recommendations for next year. In particular, they will be considering whether to split the trip between Washington, D.C. and New York City as you did this year or spend the whole time in either New York or Washington in order to concentrate more on one city. They would like to hear from this year's 8th grade students before they make any recommendations.

Write a letter to the House Leaders describing your impressions of what New York City offers and of what Washington, D.C. offers to visiting students. Then indicate your recommendation for which city or cities should be included in next year's trip. Give reasons for your recommendation.

APPENDIX C

WRITING PROCESS INTERVIEW FORMS

1. T.V. Watching Letter
2. Movine Rating Essay
3. Videogames Essay
4. Washington Trip Letter

Interviewer _____

STUDENT INTERVIEW FORM

Waters" STEPS in Writing Curriculum

Writing Process Interview I

Date of Interview _____ Date of Paper Assignment _____

Name _____

Class _____ Teacher _____

INTRODUCTION:

"I'm and I'm working with the school to make certain students' needs in writing instruction are being met. My basic purpose in talking with you is to ask your help in understanding just how students go about writing. Several of you were chosen at random to give us a picture of how different students approach and complete writing assignments. I'll be talking with each of you four/two times during the year to see how your approaches differ in different assignments. It will be a big help to us in understanding what actually goes on while you write, which we can't tell from your paper by itself. We will be able to use the help you give us to make certain that the course you are taking meets the needs you have in getting assignments done successfully.

I'll be taking notes during our talk because I'm really interested in what you are saying."

I. GENERAL QUESTIONS:

A. Does writing come easily to you?

P: If yes,...do you like to write? Do you write often? Has school helped make it easy for you? In what way, etc.

P: If no, ...It is very difficult for many of us to write...but it seems to be important to learn...Has it ever been easier for you?

B. What's easiest for you in school?

P: What subject is easiest? (If they are having trouble)

C. What's most difficult for you in school?

Note here observations about student's level of comfort, composure, openness and approach, etc. during interview as well as any circumstances that might invalidate this interview.

D. Where does writing fit into these extremes?
P: Where does it fit between your response to easiest and most difficult?

E. What is your favorite subject? Why?

F. Getting back to writing, what do you find makes you want to write?
P: Are there times when you really want to write? What are they?

P: Are there times that you are more willing to write than others? What makes that so?

G. What makes it easier or harder for you to complete a writing assignment? (Indicate which came from probes you used & which were spontaneous)
P: Topic - choose yourself or have it assigned?
- familiarity with topic or having to look things up?
- interest in topic?

P: Structure of Assignment - it tells clearly what is expected or leaves it up to you?

P: Where you work on it - in class or take it home?

P: Time you have to work on it - do you need a lot of time? More than a class period?

P: Using resources - does it help you to talk about it with people?
- be able to look things up?
- do you prefer to work by yourself with your own ideas?
- do you like to look at other writing like it?

H. What kind of writing do you like to do the best?
P: Letters (give a <u>sampling</u> of probes)
Journal writing
Stories
Opinions
Poetry
Research paper

I. Have you ever had a teacher that really helped make it easy for you?
P: What did he/she do that made it easier?

- -

"You just finished writing a paper. I'd like to spend a few minutes talking with you about your experience with that paper."

II. OPINION OF TOPIC

A. Is watching t.v. during the week a subject you have strong feelings about?
P: Do you really care about it? (get sense of strength of yes or no)
P: Do your parents care?

B. What <u>is</u> your opinion on the issue?

C. What do other people say about the issue who might feel differently from you?

III. EXPERIENCE WITH THIS ASSIGNMENT

A. Did you have a reaction when you first read the assignment? What was it?
P: Then what?

B. How did you go about actually <u>writing</u> your letter?
P: What did you do first?
P: What did you do next, etc.

B. Did you make notes or an outline or anything like that before starting? (If not mentioned in B. If mentioned, refer to their response in B and use same probes.)

P: Can you describe what they looked like? Were there a lot of them?

P: What did you use them for? Just to get thoughts together? to organize your paper?

C. What did you try to accomplish in your letter?

D. Did you have any problems/get stuck at any point in your thinking or writing?

P: Could you describe what they were/what happened?

P: What did you do?

E. Did you think about how Dr. Schay might react as you wrote the letter? (If this was answered in C, just skip over it)

P: In what way?

F. When you got your paper back the second day, did you make any changes?

P: Why did you make them?
(Get an idea of how extensive they were)

P: Would you have wanted to make more changes?

G. Did you like how your writing came out?

P: Was there a part or parts you were particularly pleased with? What was it/were they?

P: Was there a part or parts you didn't like so well/weren't so satisfied with? What was it/were they?

"THANK YOU FOR TALKING WITH ME; I ENJOYED MEETING YOU AND YOU WERE A GREAT HELP! I LOOK FORWARD TO TALKING WITH YOU AGAIN."

Interviewer _____

STUDENT INTERVIEW FORM

Waters" STEPS in Writing Curriculum

Writing Process Interview II

Date of Interview _____ Date of Paper Assignment _____

Name _____

Class _____ Teacher _____

INTRODUCTION

"Hello . It's nice to see you again. In case you don't recall my name, I'm , and, as you know, I'm working with the school to study writing instruction. Today I'd like to talk with you for a few minutes about the writing assignment you just completed for Reading Writing Workshop. I really appreciate your taking the time to help us out.

I. OPINION OF TOPIC

A. I understand that the topic of your last paper had to do with your opinions about movie ratings and restrictions. Is this a subject you have strong feelings about?

P: Do you really care about it? (get sense of strength of yes or no)

P: Do your parents care?

B. What is your opinion on the issue?

P: Why?

C. What do other people say about the issue who might feel differently from you?

II. CONNECTION OF ASSIGNMENT WITH INSTRUCTION

A. The last time we spoke you had written a letter about watching television on week nights. Did you find this assignment either easier or more difficult than that one?

P: Why do you think this is so (If they have indicated a difference)

P: Can you think what might have made it easier? (If they said more difficult)

B. Have you been doing a lot of writing in your Reading Writing Workshop?
   P: What kinds of things have you been writing?

   P: How have you felt about the writing you've been doing in class? (if students have snown a lot of affect in their initial response to the interview question, you might want to follow it up right away by using this probe first)

C. Do you think what you've been doing in class influenced how you wrote the paper you just finished?

   P: Can you think of any specific examples, like the things you paid special attention to?

III. EXPERIENCE WITH THIS ASSIGNMENT

A. Did you have a reaction when you first read the assignment? What was it?
   P: Then what?

B. How did you go about actually writing your essay?
   P: What did you do first?

   P: What did you do next, etc.

C. Did you make notes or an outline or anything like that before starting? (If not mentioned in B. If mentioned, refer to their response in B and use same probes.)
   P: Can you describe what they looked like? Were there a lot of them?

   P: What did you use them for? Just to get thoughts together? to organize your paper?

   P: Is this what you normally do? (If not: Why did you do it this time? and Was it helpful?)

D. What did you try to accomplish in your essay?

E. Did you have any problems/get stuck at any point in your thinking or writing?
   P: Could you describe what they were/what happened?
   P: What did you do?

F. Did you have some reasons to support your opinion that you felt more strongly about than others?
   P: How did you distinguish between them? (Some of this might have been answered in D; if so, refer back to it before using probe)

G. When you got your paper back for revision, did you make any changes?
   P: Why did you make changes?
   P: What kinds of changes did you make? (Get an idea of how extensive they were)
   P: Would you have wanted to make more changes?

H. Did you like how your writing came out?
   P: Was there a part or parts you were particularly pleased with? What was it/were they?
   P: Was there a part or parts you didn't like so well/weren't so satisfied with? What was it/were they?

"THANK YOU FOR TALKING WITH ME; YOU WERE A GREAT HELP AGAIN! I LOOK FORWARD TO TALKING WITH YOU IN A FEW MONTHS. HAVE A NICE HOLIDAY!"

Note here observations about student's level of comfort, composure, openness and approach during interview as well as any circumstances that might invalidate this interview.

Interviewer _____

Date of Interview _____ Date of Paper Assignment _____

Waters' STEPS in Writing Curriculum

Name _____

Writing Process Interview III

Class _____ Teacher _____

INTRODUCTION

"Hello . It's nice to see you again. In case you don't recall my name, I'm , and, as you know, I'm working with the school to study writing instruction. Today I'd like to talk with you for a few minutes about the writing assignment you have just been working on for Reading Writing Workshop. I really appreciate your taking the time to help us out.

I. OPINION OF TOPIC

A. I understand that the topic of this last paper had to do with your predictions about how people feel and behave towards videogames. Is the subject of video games something you have strong feelings about?
P: Do you really care about it?

B. What was your prediction about videogames?
P: Why?

C. Did you find that the responses to your questionnaire differed at all from your prediction?
P: In what way(s)?

P: How do you account for that?

Note here observations about student's level of comfort, composure, openness and approach during interview as well as any circumstances that might invalidate this interview.

 Name _____

II. CONNECTION OF ASSIGNMENT WITH INSTRUCTION

A. The last time we spoke you had written a paper about movie ratings and restrictions. Did you find this assignment on videogames either easier or more difficult that the one on movie ratings?
P: Why do you think this is so (if they have indicated a difference)

[If their general response to the probe does not include the following, ask them as probes:
- Which topic interested you more?

- Which topic did you have more to say about? Why?

- Did the other work you've done in the course make a difference in how hard or easy this assignment was for you?]

B. Have you been doing a lot of writing and organizing for writing in your Reading Writing Workshop in the last month or two?
P: What kinds of things have you been writing?

P: How have you felt about the writing you've been doing in class? [If students have shown a lot of affect in their initial response to the interview question, you might want to follow it up right away by using this probe first]

C. Do you think what you've been doing in class influenced how you wrote the paper you just finished or are just finishing?
P: Can you think of any apecific examples, like the things you paid special attention to?

III. EXPERIENCE WITH THIS ASSIGNMENT

A. At what stage of your paper are you right now?
P: First draft? Completed paper?

 Name _____

B. Did you have a reaction when you first heard about the research assignment? What was it?

P: Then what? (Did you keep on feeling that way or did your feelings change?)

C. How did you go [or are you going] about actually writing your essay?

P: What did you do first?

P: What did you [will you] do next, etc.

[Note to Interviewer: when re-copying, please include any of these comments that answer other questions under the appropriate questions as well]

D. Did you make notes or an outline or anything like that before starting? [If not mentioned in C. If mentioned, refer to their response in C and use same probes.]

P: Can you describe what they looked like? Were there a lot of them?

P: What did you use them for? Just to get thoughts together? to organize your paper?

P: Is this what you normally do? [If not: Why did you do it this time? Was it helpful?]

E. What did you try [are you trying] to accomplish in your essay?

F. Did you find it difficult making a prediction?

P: Why do you think this was so?

G. How did you go about keeping track of the data that pertained to your topic from the questionnaires you collected?

H. [use one of the following questions]

You mentioned earlier that the results of your questionnaire supported your prediction, How did you go about using that information in your paper?
P: Did you find it easy enough to write about?

or

You mentioned earlier that the results from the questionnaire differed from your prediction and you told me why you thought that was so. How did you go about using that information in the paper [If they're not forthcoming, you can ask, Did you use the explanation you gave me? If not, why not?]
P: Did you find it easy enough to write about?

I. Did you have [are you having] any problems/get stuck at any point in your thinking or writing?
P: Could you describe what they were [are]/what happened?

P: What did you do [will you do]?

*J. What role did the computer play in writing your paper?
P: Was it helpful?

* This question is only for students in the computer sections

K. Did you [will you] have any opportunities to revise your paper? What were they [will they be]?

P: Did you [will you] make changes? Why those particular changes?

P: What kinds of changes did you [will you] make? [get an idea of how extensive they were or will be]

P: Would you have wanted to make more changes?

L. Do you like how your writing came [is coming] out?

P: Is there a part or parts you are particularly pleased with? What is it/are they?

P: Is there a part or parts you don't like so well/aren't so satisfied with? What is it/are they?

"THANK YOU FOR TALKING WITH ME: YOU WERE A GREAT HELP AGAIN! I LOOK FORWARD TO TALKING WITH YOU IN A MONTH OR SO. ARE YOU GOING TO WASHINGTON NEXT WEEK? HAVE FUN!"

Interviewer _____

STUDENT INTERVIEW FORM

Waters' STEPS in Writing Curriculum

Writing Process Interview IV

Date of Interview _____ Date of Paper Assignment _____

Name _____

Class _____ Teacher _____

INTRODUCTION

"Hello . It's nice to see you again. In case you don't recall my name, I'm , and, as you know, I'm working with the school to study writing instruction. Today I'd like to talk with you for a few minutes about the writing assignment you just completed in Reading Writing Workshop/English. I really appreciate your taking the time to help us out.

I. GENERAL QUESTIONS:

A. Back in September you indicated to me/Mrs. Morash that writing does/doesn't come easily to you. Is that still the case?
P: (If different) What do you think accounts for the change?

B. In September you also indicated that was easiest for you in school. Is that still the case?
P: (If different) What is easiest? How do you account for the change?

C. You also indicated that was most difficult for you in school. Is that still the case?
P: (If different) What is most difficult? How do you account for the change?

D. (Ask if you can't already tell from the responses to questions A-C)
Where does writing fit into these extremes?
P: Where does it fit between (C & B responses)?

Note here observations about student's level of comfort, composure, openness, and approach, etc. during interview as well as any circumstances which may invalidate this interview.

E. Is still your favorite subject?
P: (If different) What is your favorite subject? Why do you think this changed?

F. Getting back to writing, what do you now find makes it easier or harder to complete a writing assignment? (Indicate which came from probes you used and which were spontaneous)
P: Topic - choose yourself or have it assigned?
- familiarity with topic or having to look things up?
- interest in topic?

P: Structure of assignment - it tells clearly what is expected or leaves it up to you?

P: Where you work on it - in class or take it home?

P: Time you have to work on it - do you need a lot of time? More than a class period?

P: Using resources - does it help you to talk about it with people?
- to be able to look things up? gather data?
- do you prefer to work by yourself with your own ideas?
- do you like to look at other writing like it?

G. (Ask if not answered already in earlier questions)
Has Reading Writing Workshop/English made writing any easier for you?
P: (If yes) What happened in the course that it made it easier?

P: (If no) Did it make it more difficult? Why do you think this was so?

II. OPINION OF TOPIC

A. I understand that for your last paper in Reading Writing Workshop/English you were asked to write a letter to the 8th grade house leaders telling them where you think the 8th grade should go for their trip next year. Is this a subject you have strong feelings about?
P: (Try to get a sense of the strength of the yes or no)

B. What is your recommendation for the best 8th grade trip?
P: Why?

C. What might other people say about the issue who feel differently from you?

III. CONNECTION OF ASSIGNMENT WITH INSTRUCTION

For Reading Writing Workshop students:

A. The last time we spoke you had written an essay about videogames. Did you find this assignment either easier or more difficult than that one?
P: Why do you think this is so (If they have indicated a difference)
[If general response to the probe does not include the following, ask them as probes. Check if you had to use it as a probe.]

___Which topic interested you more?

___ Which topic did you have more to say about? Why?

For English students:

A. Did you find this assignment either easier or more difficult than the other papers you've done this year in English?
P: In what respects?

B. Do you think what you've been doing in Reading Writing Workshop/English influenced how you wrote the paper you just finished?
P: Can you think of any specific examples, like the things you paid special attention to?

IV. EXPERIENCE WITH THIS ASSIGNMENT

A. Did you have a reaction when you first read the assignment? What was it?
P: Then what? (Did you keep on feeling that way or did your feelings change)

B. How did you go about actually writing your essay?
P: What did you do first?

P: What did you do next, etc.

[Note to Interviewer: when re-copying, please include any of these comments that answer other questions under the appropriate questions as well]

C. Did you make notes or an outline or anything like that before starting?
(If not mentioned in B. If mentioned, refer to their response in B and use same probes.)
P: Can you describe what they looked like? Were there a lot of them?

P: What did you use them for? Just to get thoughts together? to organize your paper?

Sybil: P: (Refer to earlier interviews here)
It seems from our other talks that this is/is not what you normally do.
Am I right? (If not: Why did you do it this time? and Was it helpful?)

Fay: P: Is this what you normally do? (If not: Why did you do it this time? and Was it helpful?)

D. What did you try to accomplish in your letter?

E. Did you have any problems/get stuck at any point in your thinking or writing?
P: Could you describe what they were/what happened?

P: What did you do?

 Name _____

F. Did you have any opportunities to revise your paper? What were they?
   P: Did you make changes? Why those particular changes?

   P: What kinds of changes did you make? (grammar, ideas, etc; try to get an ideas of how extensive they were)

   P: Would you have wanted to make any more changes?

G. Did you like how your writing came out?
   P: Was there a part or parts you were particularly pleased with? What was it/were they?

   P: Was there a part or parts you didn't like so well/weren't so satisfied with? What was it/were they?

"THANK YOU FOR TALKING WITH ME; YOU WERE A GREAT HELP AGAIN! I HAVE REALLY ENJOYED GETTING TO KNOW YOU. GOOD LUCK ON YOUR EXAMS! AND HAVE A NICE SUMMER."

APPENDIX D

COURSE EVALUATION INTERVIEW FORM

STUDENT INTERVIEW FORM

STEPS in Thinking/Writing/Problem Solving

Wayland Reading/Writing Workshop

Name: _____

Place: _____

Date/time: _____

INTRODUCTION:
Hello. My name is Dr. Shann. Thank you for agreeing to meet with me. My purpose in talking to you is to get your opinions on how well a program of instruction helps students learn--which activities work and which ones don't work. I'd like to start by asking you some questions about school in general, and then focus on the Reading-Writing Workshop in particular. Your opinions are important. After all, students are the ones our school programs are supposed to help.

I. GENERAL questions:

A. How do you feel about going to school?
Probes: Is it a waste of time?
Is it always great, fantastic?
OK, somewhere in between?

B. What do you like most about school?
Probes: Nothing?
Anything else?

C. What do you like least about school?
Probes: Nothing you really dislike?
Anything else?

D. What is easiest for you in school?

E. What is most difficult?

Note here observations about student's level of comfort, composure, openness and approach during interview as well as any circumstances that might invalidate this interview.

QUESTIONS SPECIFIC TO RRW AND STEPS

Now I'd like to ask more specific questions about ways of teaching and learning, class experiences, and ways of organizing materials that might help you learn better. Remember, you know what helps you and what doesn't help. Your opinions are important.

II. PERCEIVED PURPOSE OF THE CURRICULUM

A. I understand that the Reading/Writing Workshop is supposed to help you with difficulties in ..... (Use as appropriate what student named as difficulty in general responses about school.)

Probes: Is that how you see the course?
Is it broader than that?
What do you think is the purpose of the course?
How is it supposed to help you?

B. Let me ask that question a little bit differently. If one of your friends asked you what the course was all about, how would you describe it?

C. How has your teacher described the course to you? (Did the teacher make the goals explicit?)

D. What percentage of time in the course is given to:

1. Reading _____%
2. Writing _____%
3. Thinking _____%
4. Other _____%

F. What kinds of activities would you include in each category?

1. Reading
2. Writing
3. Thinking
4. Other

G. Were connections made between these areas of the course, or were they taught as separate activities?

H. What was a typical class period like?

III. SELF EVALUATION

A. Has the Reading/Writing Workshop helped in any of these areas?
Probes: Any help?
In what areas have you improved?

B. Can you say any more about <u>how</u> this course has helped?

IV. TRANSFER VALUE

A. Has the Reading-Writing Workshop (and especially the STEPS portion) helped you learn better in other areas in or out of school?
Probes: (Check if used. List responses, prompted or not, in appropriate spaces.)

____1. Other courses you are taking?

____2. How about in other things you do outside of school?

V. AFFECTIVE OUTCOMES

A. Do you feel any more confident now about your abilities in school? (If yes) Can you explain why you feel this way?

B. Has the course affected whether you'll attempt a difficult assignment, or how long you'll stay with it? (Motivation, stamina)

C. Specifically with respect to writing assignments, has the Reading-Writing Workshop made writing any easier for you? Is it less stressful for you to do a writing assignment than it was at the beginning of this school year?

D. Do you think this course has made you learn more independently, without as much reliance on the teacher?

VI. TEACHING STRATEGIES

A. Is the Reading-Writing Workshop taught any differently from the way most of your other courses are taught?
Probes: How is that so?
No difference at all?
How about in the way the teacher treats you?

B. (As appropriate) Do you like the different way of teaching? Does it help you learn any better?

C. Could any teacher teach a course like the Reading/Writing Workshop? (Are special attitudes, diagnostic competencies, or particular knowledge required?)

VII. STUDENT INTERACTIONS

A. Do the students in the Workshop course react differently to one another from the way they do in most classes?
Probes: How is that so?
There is no difference?

B. Have you learned anything from other students in the course, or do the knowledge and training come mostly from the teacher?

C. Is that so in most of the courses you take?

D. What kinds class arrangements do you use for instruction in the Reading-Writing Workshop? (Check)
Probes: ____1. Whole class
____2. Small group
____3. Pairs
____4. Individual work

E. Can you rank order these from most to least used arrangements? (Show rank order in area to right of above question.)

F. Do the group arrangements allow some students to "coast" while others do the work?

VIII. CLASS SIZE

A. Were there few enough students in the course for you to get personal attention from the teacher?

B. Is personal attention from the teacher necessary?

IX. LEARNING ACTIVITIES

A. Of the exercises, activities, and assignments you've done in the course, which ones did you like?

B. Which one didn't you like?

X. STUDENT RECOMMENDATIONS

A. Would you recommend <u>any changes</u> in the course?
(Elicit here unprompted remarks.)

B. How about in the <u>content</u> of the courses?

C. How about changes in the <u>relative emphasis</u> (time) given to the different areas of content or skills in the course?

D. In the <u>number or length of class meeting</u> each week?

E. Who do you think should take the course? Only certain types of students, or everybody?

F. Is there anything else you'd like to add about the course and the things we've talked about?

THANK YOU VERY MUCH. YOU'VE BEEN A GREAT HELP!

APPENDIX E

SAMPLE APPLICATIONS OF THE "STUDENTS" OBSERVATION SYSTEM

reread 12:47-1:25 beginning

STUDENTS

Teacher ___ Date 1/25/84 STEPS/non-STEPS STEPS

Observation # 2 Observer ___ # of Students 16

Physical Arrangement 5- tables facing front Content Focus SKILLS/PROB SOLVING

Topic(s)/Activity Focus during Segments

(over)

		1	2	3	4	5	6	7
Non-verbal Activities	Takes notes from teacher lecture							
	Generates lists of ideas for pre-writing							
	Writes composition/illustrates							
	Organizes symbolic/numerical information on board or paper							
	Writes (prestructured)							
	Consults reference materials					𝍸 𝍸		
	Reads - task					𝍸 𝍸	1	
	Free reading							
Interactions: Students	Talks to another - task							
	Talks to another - social	1		1	1			𝍸
	Takes part in small group discussion - task							
	Takes part in small group discussion - social							
	Takes part in class discussion or presentation			1				1
Interactions: Teacher	Gives prestructured information to teacher							
	Gives original information to teacher		1	1				
	Seeks information from teacher						1	1
	Talks to teacher - social							
Listen/Look	Listen/look at student	1	11	1	111		𝍸	𝍸 11
	Listen/look at small group							
	Listen/look at class							
	Listen/look at teacher	𝍸 1111	𝍸 𝍸 1	𝍸 111	𝍸 1111	11	11 11	1
	Listen/look at film or AV materials							
Other	Collecting materials/mainten.							
	Resting/waiting							
	Fooling around				11			
	Distracted	𝍸	11	11	1		𝍸	1
		15	16	16	16	16	16	16

STUDENTS

Period

Unit 2 Summary Modified

Teacher _____ Date 1/25/84 STEPS/non-STEPS STEPS

Observation # 3 Observer _____ # of Students 13

Physical Arrangement 5 (tables all students facing front Content Focus SKILLS/PROBLEM-SOLVI

Topic(s)/Activity Focus during Segments (writing directions for drawing the figure given

↳ see over

		1	2	3	4	5	6	7
Non-verbal Activities	Takes notes from teacher lecture							
	Generates lists of ideas for pre-writing							
	Writes composition/illustrates							
	Organizes symbolic/numerical information on board or paper			//	𝍸 𝍸 /	𝍸 𝍸	𝍸 ////	𝍸 𝍸 /
	Writes (prestructured)							
	Consults reference materials							
	Reads - task			//		//	//	/
	Free reading							
Interactions: Students	Talks to another - task			//				
	Talks to another - social	//	//					
	Takes part in small group discussion - task							
	Takes part in small group discussion - social							
	Takes part in class discussion or presentation							
Interactions: Teacher	Gives prestructured information to teacher							
	Gives original information to teacher		/	/				
	Seeks information from teacher			//		/	/	
	Talks to teacher - social							
Listen/Look	Listen/look at student		/					
	Listen/look at small group							
	Listen/look at class							
	Listen/look at teacher	𝍸 //	𝍸 ///	///	/			
	Listen/look at film or AV materials							
Other	Collecting materials/mainten.							/
	Resting/waiting							
	Fooling around	/			/			
	Distracted	///	/	/			/	
		13	13	13	13	12	13	13

STUDENTS

Teacher _____ Date Oct 24 1983 STEPS/non-STEPS _____

Observation # 1 Observer _____ # of Students 18

Physical Arrangement [illegible] Content Focus [illegible]

Topic(s)/Activity Focus during Segments [illegible]

8:13-8:59 a.m.

		8:13-8:21 1	8:21-8:29 2	8:29-8:37 3	8:37-8:45 4	8:45-8:53 5	8:53-9:01 6	9:01-9:07 7
Non-verbal Activities	Takes notes from teacher lecture							
	Generates lists of ideas for pre-writing							
	Writes composition/illustrates	////	////	///				
	Organizes symbolic/numerical information on board or paper							
	Writes (prestructured)				/			
	Consults reference materials	//			///			
	Reads - task			//				
	Free reading							
Interactions Students	Talks to another - task	//		/				
	Talks to another - social							
	Takes part in small group discussion - task							
	Takes part in small group discussion - social							
	Takes part in class discussion or presentation					/		
Interactions Teacher	Gives prestructured information to teacher							
	Gives original information to teacher					//	/	
	Seeks information from teacher		/					
	Talks to teacher - social							
Listen/Look	Listen/look at student	/						
	Listen/look at small group							
	Listen/look at class	/				////	////	////
	Listen/look at teacher	///		////	////			
	Listen/look at film or AV materials							
Other	Collecting materials/mainten.	//		/				
	Resting/waiting			/		/		
	Fooling around							
	Distracted							

APPENDIX F

COMPILATION OF RESPONSES TO THE STEPS UNIT VII COURSE EVALUATION FORM

RESPONSES TO COURSE EVALUATION FORM

1. What was the easiest part of the course, for you?

- categorizing and solving mysteries
- having my questions answered on the computer
- the writing assignments
- the reading logs
- finding answers to word relationships, math reasoning, reconstructing data when written in steps
- reading logs, writing stories
- the packets we did Units I-IV
- problems with Detective Zurdley, etc.; it was fun solving them
- some of the drills
- the writing skills; they were easy and fun to figure out
- all pretty much the same
- times when we had writing assignments
- math reasoning
- the story and then you did the questions
- reading
- reading logs
- writing assignments
- when we used the computer it just wan't easy, it was fun and exciting
- writing assignments
- reading aloud in class plus doing short associated assignments on readings in class
- math reasoning
- writing assignments
- reading, plays
- doing worksheets on analogies, etc.
- reading books
- short mysteries becaise I always like mysters
- the reading we had to do; it was easiest because I like to read
- problem solving
- reading stories
- reading logs
- some of the writing assignments
- problem solving
- analogy problems

- drunk driving project
- the little essays and reports
- math reasoning and stories with holes
- reading those stories and the assignments
- the "rounds" in baseball game problem
- the math reasoning problems
- reading logs
- the writing assignments; even with the deadlines I had a chance and enough time to finish and enjoy it.

2. What was the hardest part of the course, for you?

- reading and trying to keep up with reading logs
- reading logs
- solving verbal reasoning problems
- the tests and reading plays out loud
- word problems and detective stories, finding key words and phrases
- solving problems
- the writing assignments sometimes
- analogies. Some easy, some hard, but frustrated me because I had to read them over and over
- problably reading, because I'm on and off
- some of the stories getting all of your information in order and all together
- putting data in essay of videogames
- computers and reading logs
- careful reading
- writing the stories
- writing
- questions on stories
- reading logs
- mostly all of the work like testing and worksheets
- math reasoning
- reading
- outside writing assignments that I'm not interest in
- analogies
- getting to school on time
- long boring writing
- doing questions on the reading

- writing part, because I never really could write
- for me it was doing the essays in the beginning, but now really nothing comes hard
- the mystery problems
- writing essays
- writing assignments
- reading 75 pages
- essays
- planning and some writing
- videogames
- getting the reading done
- reading 75 pages every week
- the writing assignments
- there wasn't any really hard part of the course for me. If there was it was "Red Crossing the Desert"
- writing a fluent student log
- practice tests
- reading logs; I really wasn't interested in doing them

3. Was there any section(s) that you felt were especially worthwhile and should always be in a course like this?

- Units on Drunk Driving, movies and other various writing assignments
- reading books and writing essays--loved reading all the stories/plays--wanted more
- the major writings on certain topics (but have a choice like MacDonald's) and similarities
- keep doing the reading logs
- most important thing was regularly doing writing assignments; others were finding relationships, making charts or drawings for math reasoning problems
- reading logs--I though they helped my understand the book more
- no
- all sections helped us
- all pretty good
- it is very good to have a course like this; you learn a lot from the writing skills; there should always be this course
- the essays good to learn to do ever though I didn't enjoy them
- the problems. They teach you to look at the problem more carefully
- careful reading
- the stories with holes; I learned a lot from them
- drunk driving

- fine as it is
- when we used the computer which was a good experience
- careful reading problems
- reading and writing
- I think reading stories aloud is good because everyone gets to know how each person reads. Also doing the class work question-writing assignment on that topic is good because we were able to help each other.
- math reasoning
- reading
- plays--it helps reading skills
- math reasoning and anlogies were fun
- reading is very important; have future kids read a lot
- all sections were helpful and worthwhile to us
- the mini-mystery unit was worthwhile because they were fun to figure out
- not really
- I think the problem solving was an excellent idea
- no
- problem solving
- yes, the detective and analogy problems
- all are sections I guess were important, especially drunk driving
- yes, learning how to put together a report
- stories with holes
- the writing and unit assignments were very helpful in this course
- I think the mystery problems were worthwhile because it teaches students how to figure out problems
- Yes, I think the detective type problems should be left in because they make a kid's brain always be on the alert and thinking
- practice tests; they were good help on the final
- writing assignments and reading in class should always be in the course

4. Was there any section(s) of the course that you felt were unnecessary and should be left out another year?

- no = 16 student replies
- reading 75 pages per week
- reading logs and being interviewed on essays you write
- Shackleton story
- Do different kinds of writing stories, like maybe make believe stories
- the videogame and movie ratings--they don't really affect anyone and were boring. Should pick more interesting topics next year.

- some writing assignments because some boring. Try to come up with more interesting assignments
- analogies because they didn't seem to help me much
- keep everything
- no, but don't do as much study skills work
- the story on video games
- reading logs
- the only thing I don't understand is why we did those reading stories with questions.
- the essay on videogames and some of the other topics you had us writ essays on. Drunk driving was good, though
- weekly reading logs; it should be bi-weekly
- videogames sheets
- unimportant set topics like videogames or movie theatres
- drunk driving assignment, reading logs
- videogames thing
- I didn't think there was one section that wasn't helpful

5. Was there any section(s) that didn't have enough problems or assignments in it to enable you to learn much of anything?

- math reasoning should have more problems
- categorizing

6. Did any sections have too much material so that the skills learning became boring?

- too much to learn sometimes
- videogames uninteresting
- reading logs
- reading logs
- videogames and other set topics
- don't do as much study skills work
- short mysteries got boring after awhile
- mysteries
- essays

7. Has the work done here helped you in other courses you took this year?

- Yes with no specifics = 3
- Some = 2
- Not Sure = 1
- No = 6
- English = 18

- Science = 1
- Math = 2
- to look more carefully; read twice
- in writing reports and thinking problems out

8. Do you have any other comments you would like to make?

- Reading logs should be verbal
- We had practically no work out of class
- We didn't have enough problem writing
- In each section you could give other homework besides reading; we should make finishing a book more of a goal
- I like this year's reading better than last year
- Math reasoning sort of hard and got me confused
- Maybe make logs more frequent and lower the number of pages